

# AGRICULTURAL OUTLOOK

July 1987

Economic Research Service  
United States Department of Agriculture

Exports Beginning To Grow

# AGRICULTURAL OUTLOOK

July 1987/AO-132



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# In Brief . . . News of Export Gain, Inflation, Third World Debt

**Pork output** is expected to increase about 8 percent above a year earlier in the second half of 1987, after decreasing 4 percent in the first half. Second-half total poultry production likely will expand 9 to 10 percent from a year earlier, with the first half up about 10 percent also.

However, **beef production** is expected to decline 5 to 7 percent in the second half. The gain in the pork and poultry sectors should keep per capita meat consumption near to slightly above the 1986 levels.

**Positive returns** near \$36 per cow in 1986 and projected favorable returns in 1987 may encourage cow-calf producers to expand their beef cow herds and take advantage of abundant forage supplies. However, the incentives for a sharp, broad national expansion are not present, as 1986 was the first year of substantial positive cash net returns since 1981. By 1988, large pork and poultry meat supplies may reduce net returns, limiting additional expansion in the beef cow herd.

**Planting conditions** for major U.S. field crops were favorable this spring. Planting progress was well ahead of normal, improving the chances of above-average yields. But, with acreage down and export volume up, stocks are expected to decline.

The inflation story for the first part of 1987 is a rising underlying rate—probably due to the falling value of the dollar and rising prices for imported goods—and a higher volatile-price rate—mainly because of oil and food prices. The spurt in oil prices is likely to be over; prices have changed little in the last 3 months. Thus, there is a good chance that the run-up in inflation will prove temporary.



The volume of U.S. exports is rising in response to lower prices, a less expensive dollar, growing foreign demand, reduced foreign supplies, and the Export Enhancement Program (EEP). Export volume in fiscal 1987 is expected to climb more than 15 percent from last year, the first increase in 7 years.

Although prices received for most grain and oilseed exports are lower and the value of shipments is down, the value is up for cotton, livestock products, and horticultural products—commodities benefiting more from the lower valued dollar. The value of all exports is forecast about 5 percent above last year, compared with falling values in recent years.

**Extensive third world debt** absorbs foreign exchange that might otherwise be used to import farm products, and it limits prospects for economic development. The debt situation affects

U.S. farmers because many problem debtors had been part of the United States' fastest growing market for agricultural exports. Problems related to overborrowing are likely to plague the global economy at least into the early 1990's.

Even so, the fastest growing developing countries will be the most important growth market for U.S. exports during 1987. Strong export performance and robust economic growth in Hong Kong, Korea, and Taiwan point to increased demand for imported farm products there. Led by cotton, coarse grains, cattle hides, soybeans, and fruit, the value of U.S. exports to these countries could rise 15 percent in 1987.

Soybean meal shipments through the first half of fiscal 1987 ran more than one-third ahead of last year's pace. At a time when export increases often are attributable to Government programs (Export Enhancement, marketing loans, etc.), the surge in U.S. soybean meal exports was nevertheless the result of market forces: global demand for meal remained strong at a time when U.S. competitors had low supplies.

The USSR purchased 4 million tons of U.S. wheat this year, compared with only 150,000 the year before. Last fall, with its best crop in 8 years, the USSR cut its purchases from the United States. However, following a dry autumn and a harsh winter, Soviet purchases of U.S. corn began in late February. Offered an EEP subsidy, the Soviets started buying U.S. wheat in late spring. Largely because of the EEP, U.S. exports to Eastern Europe, China, and North Africa are also expected to rise in fiscal 1987.



## Agricultural Economy

The agricultural sector has been buffeted by the boom of the 1970's and the bust of the 1980's. Things appear to be stabilizing now: export prospects are improving, land values have stopped falling, and the credit crunch appears to be easing. Net cash income this year is forecast at \$48 to \$52 billion, compared with \$49 billion in 1986 (table 1).

Farm numbers have dropped about 2 percent per year since 1982's level of 2.4 million, after a decade of relative stability in the seventies. These aggregate data indicate that agriculture is in a position to start working its way out of its difficulties. They tell us little about what is going on inside the sector, though.

You may not know whether an egg on your refrigerator shelf is raw or hard boiled until you crack it open. If you want to know more about the farm sector, you have to crack it open, too. When you do, you will find that the sector includes a lively variety of types and sizes of farm with different legal forms of organization, different ways of operating, and different goals and family situations.

Because of this variety, changes in the statistics which describe the total sector sometimes veil surprises: when the sector as a whole is doing poorly, some farmers are still doing quite well. When the sector shows signs of improvement, some farmers nevertheless find themselves in deepening financial difficulty.

The livestock sector's net income tends to improve when the crop sector's income is down. The price of feed grain is an income item to the crop sector and an expense item to the livestock sector. To the extent that there is specialization in crop or livestock farms, a reduction in feed grain prices can cut income to crop farmers and increase income to livestock farmers. This has been happening: farm prices for feed grains dropped by one-third from 1984 to 1986 (table 4).

Crop farm income during this period has been supported by direct Government payments. Even so, net income to the crop sector is down slightly. At the same time, net income to the livestock sector has improved; lower feed costs have stimulated an increase in livestock output. Slightly lower livestock receipts are more than offset by reductions in feed costs.

Contrast this with shifts between the crop and livestock sectors during earlier periods, when export markets for grain and oil crops were burgeoning and market prices for these crops were strong. Cash grain farms flourished under these conditions, while incomes on cattle and hog farms fell.

Another example of the aggregate statistics' veiling surprises is the shift between program and nonprogram crops. Acreage restrictions on program crops can reduce surplus production and support crop prices as intended. When capitalized into land values, these programs can indirectly raise the value of land used for both program and nonprogram commodities.

Crops not covered by farm programs, such as dry beans or broccoli, may be affected by program changes. When a program crop and a nonprogram crop compete for the same land, two types of exchanges are important. First, as farmers increase or decrease participation in the program, the acreage used for nonprogram crops can change.

Second, the Secretary of Agriculture is authorized by farm legislation to permit part of acreage removed from production under commodity programs to be planted to other crops. Sweet sorghum, hay, guar, sesame, safflower, sunflower, castor beans, mustard seed, crambe, plantago ovato, flaxseed, triticale, rye, or other commodities can be designated by the Secretary if they are in demand, are not likely to in-

crease the cost of the price support program, and will not adversely affect farm income.

The 50-92 provision also allows farmers, at the discretion of the Secretary, to grow these crops. A farmer may choose to plant between 50 and 92 percent of the permitted plantings of the program crop and plant the remaining acreage to conserving uses, including the above crops. The incentive to underplant program crops as much as 50 percent from permitted acres is that the farmer receives deficiency payments for 92 percent of the permitted acreage, and has in addition the prospect of a profit from sales of the nonprogram crop.

Nonprogram crops likely to be affected by commodity programs include pulses (dry edible beans, peas, and lentils), oilseeds (sunflower, safflower, and flaxseed), hay, vegetables, and sugarbeets. Perennials and biennials are less likely because they require a multiyear commitment. Markets for most of these alternative crops are small, and many are local and depend on the availability of post-harvest processing capacity.

As an example of how program planting changes can influence nonprogram crops, a 0.5-percent change in corn acreage planted could permit a 25-percent change in dry edible bean acreage, or a 12-percent increase in sunflower acreage. This would have only a small effect on corn production and prices, but could have a major effect on dry bean or sunflower production and prices.

Such uneven crop competition resulting from Government programs raises questions by farmers about permitting idled land to be used for nonprogram crops. Programs which improve incomes for participating farmers can distribute costs and benefits in unexpected ways among other farms. [Clark Edwards (202) 786-3313]

## Livestock Overview

Meat supplies in 1987 are expected to increase about 1 percent from 1986's record, the fifth consecutive year of increase (table 10). The gain this year will occur mostly in the second half as pork and poultry production expands.

Pork output is expected to increase about 8 percent above a year earlier in the second half, after decreasing 4 percent in the first half. Second-half total



# Prime Indicators of the U.S. Agricultural Economy

Index of prices paid by farmers<sup>1</sup>

1977 = 100



Index of prices received by farmers<sup>2</sup>

1977 = 100



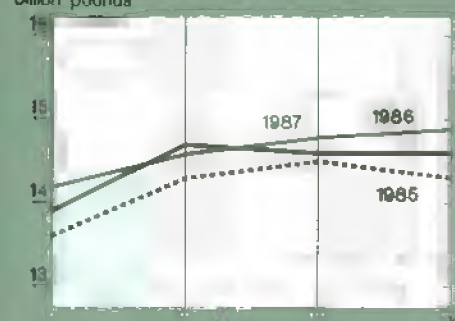
Ratio of prices received to prices paid

Percent



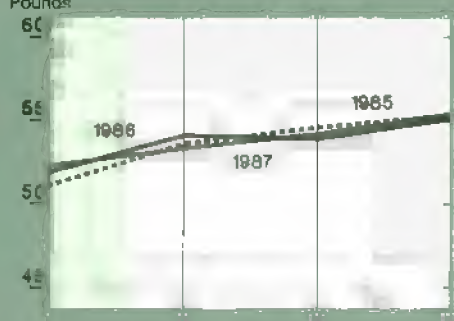
Red meat & poultry<sup>3</sup>  
production

Billion pounds



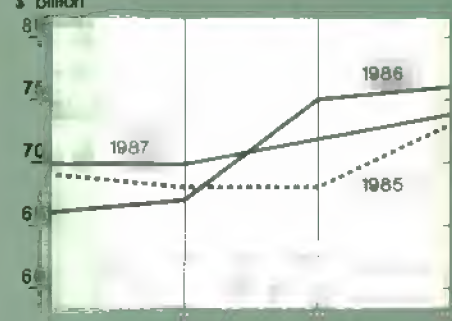
Red meat & poultry  
consumption, per capita<sup>3,4</sup>

Pounds



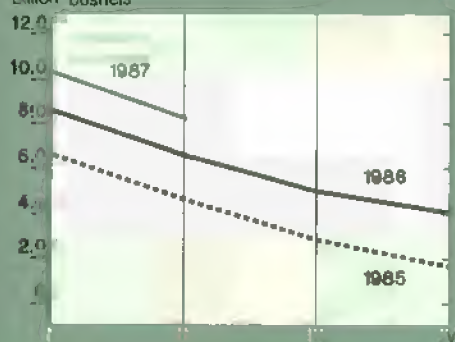
Cash receipts from  
livestock & products<sup>5</sup>

\$ billion



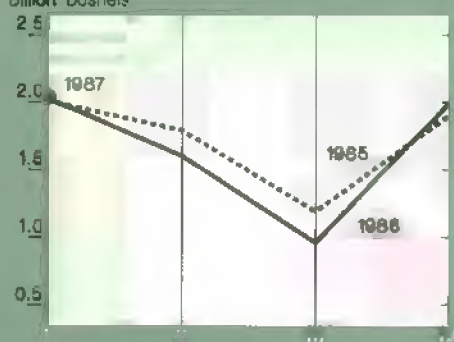
Corn beginning stocks<sup>6</sup>

Billion bushels



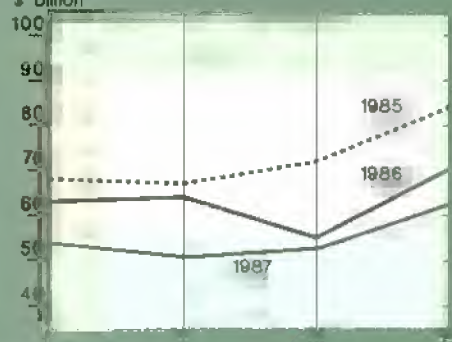
Corn disappearance<sup>6</sup>

Billion bushels



Cash receipts from crops<sup>5</sup>

\$ billion



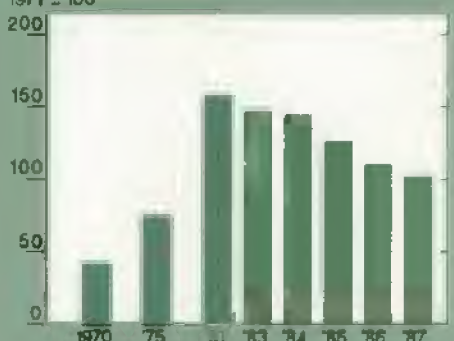
Farm net cash income

\$ billion



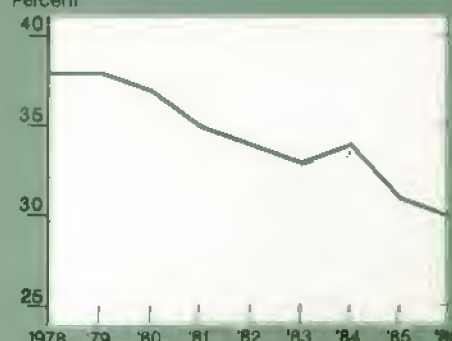
Farm real estate values

1977 = 100



Farm value/retail food costs

Percent



<sup>1</sup>For commodities and services, interest, taxes, and wages. Beginning in 1986, data are only available quarterly. <sup>2</sup>For all farm products.

<sup>3</sup>Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. <sup>4</sup>Retail weight. <sup>5</sup>Seasonally adjusted annual rate.

<sup>6</sup>I = Dec.-Feb.; II = Mar.-May; III = June-Aug.; IV = Sept.-Nov.

poultry production likely will expand 9 to 10 percent from a year earlier, with the first half up about 10 percent also. However, beef production is expected to decline 5 to 7 percent in the second half. The gain in the pork and poultry sectors should keep per capita meat consumption near to slightly above the 1986 levels.

The impact of higher meat supplies should be reflected in lower producer prices for livestock and poultry (tables 5, 16). Barrow and gilt prices may decline from an average in the low \$50's during the first half to the low \$40's by the fourth quarter. Broiler prices should drop from about 49 cents in the first half to about 47 cents in the second.

Despite lower production, cattle prices are expected to decline because of larger supplies of competing meats. Lower producer prices should reduce receipts to beef producers in the second half, offsetting some of the gains from lower feed costs. Net returns are likely to remain positive for most producers.

#### ***Pork Prices Strong***

Hog prices at the seven major markets likely averaged \$56 per cwt in the second quarter (table 16). This price strength was largely due to lower-than-expected slaughter, low frozen pork stocks, and reduced beef production. Second-quarter hog slaughter comes largely from the March 1 inventory of market hogs weighing 60-179 pounds. Inventories of these hogs increased nearly 1 percent, implying that second-quarter slaughter should be near last year's 20.3 million head.

Preliminary data show federally inspected slaughter in April and May down 11 percent from a year earlier, partly for technical reasons. This year, April and May both had one less slaughter day than in 1986. In addition, Good Friday and Easter Monday, days when slaughter drops sharply from other weekdays, were in April this year, rather than March.

Frozen pork stocks as of April 30 were 23 percent lower than a year before. As a result of lower slaughter rates and lower frozen inventory, available pork supplies are below expectations. So, pork prices remained much stronger this spring than anticipated last winter. The absence of burdensome cold storage supplies will strengthen hog prices this summer, even if slaughter rates rise as expected.

#### ***Egg Prices and Exports Slipping***

The long downward trend in egg consumption continues, and prices are also slipping. The average 1987 egg price is expected to be below 1986 as production expands somewhat. Production in the first 4 months of 1987 was 1.5 percent higher than the same period in 1986. Per capita supplies are expected to be close to 1986 levels (table 11).

Egg producers are expected to force-molt more hens this year because more pullets were added to flocks last year. However, the percentage of the flock being force-molted is lower than last year, so replacement numbers will not increase until fall. Production is expected to be 1 percent greater than last year.

Prices for cartoned Grade A large eggs in New York may average 62 to 67 cents per dozen during the second half, down from 73 cents in second-half 1986. First-quarter net exports of eggs decreased 9 percent from a year earlier. For the year as a whole, exports may be down from last year, even though the less expensive dollar makes U.S. eggs more attractive in foreign markets.

#### ***Broiler Output Up Again***

April broiler slaughter was up slightly from a year ago. For all of 1987, production may be 7 to 9 percent above the previous year (table 10). Broiler chick placements for June slaughter are 6.5 above last year. Pullet numbers in the broiler hatchery supply flock for the third quarter of 1987 will be 15 percent higher than the same period in 1986.

The January-April 12-city wholesale price for whole birds averaged 50 cents per pound, the same as in 1986. Late May and early June prices are indicating some weakness. However, with the large broiler supplies, summer prices are expected to range from 46 to 53 cents. Prices in October-December 1987 could average in the 43-49 cent range.

Broiler exports in the first quarter were up 12 percent over the previous year's first quarter. They are predicted to be up about a third for 1987 because of the Export Enhancement Program (EEP) and increased exports to Japan.

#### ***Cold-Storage Turkey Stocks Big***

Turkey slaughter during January-April 1987 was up 23 percent over a year earlier. Prices were low in January and February, higher in March and early April, and lower after Easter. Expansion appears to be continuing; poult placements are 19 percent ahead of last year. Second-half production is forecast up 15 percent over 1986.

Cold storage holdings in April were up 32 percent over April 1986 and up 17 percent from March 1987. A drop in cold storage was anticipated over Easter but did not occur. Stock building is expected for fourth-quarter holiday consumption; so prices are not expected to be drastically depressed by large storage stocks.

Prices are expected to rebound from post-Easter lows if stock rebuilding occurs as expected. Second-quarter prices likely were 56 to 57 cents, down from 68 cents in second-quarter 1986.

Prices in the second half are now forecast to be 62 to 68 cents, down from 79 in 1986. Prices could stay in this range if the rate of turkey production increase continues close to the first 4 months. However, poult placement and egg lay rates are down from previous months indicating some slowing in production increases.

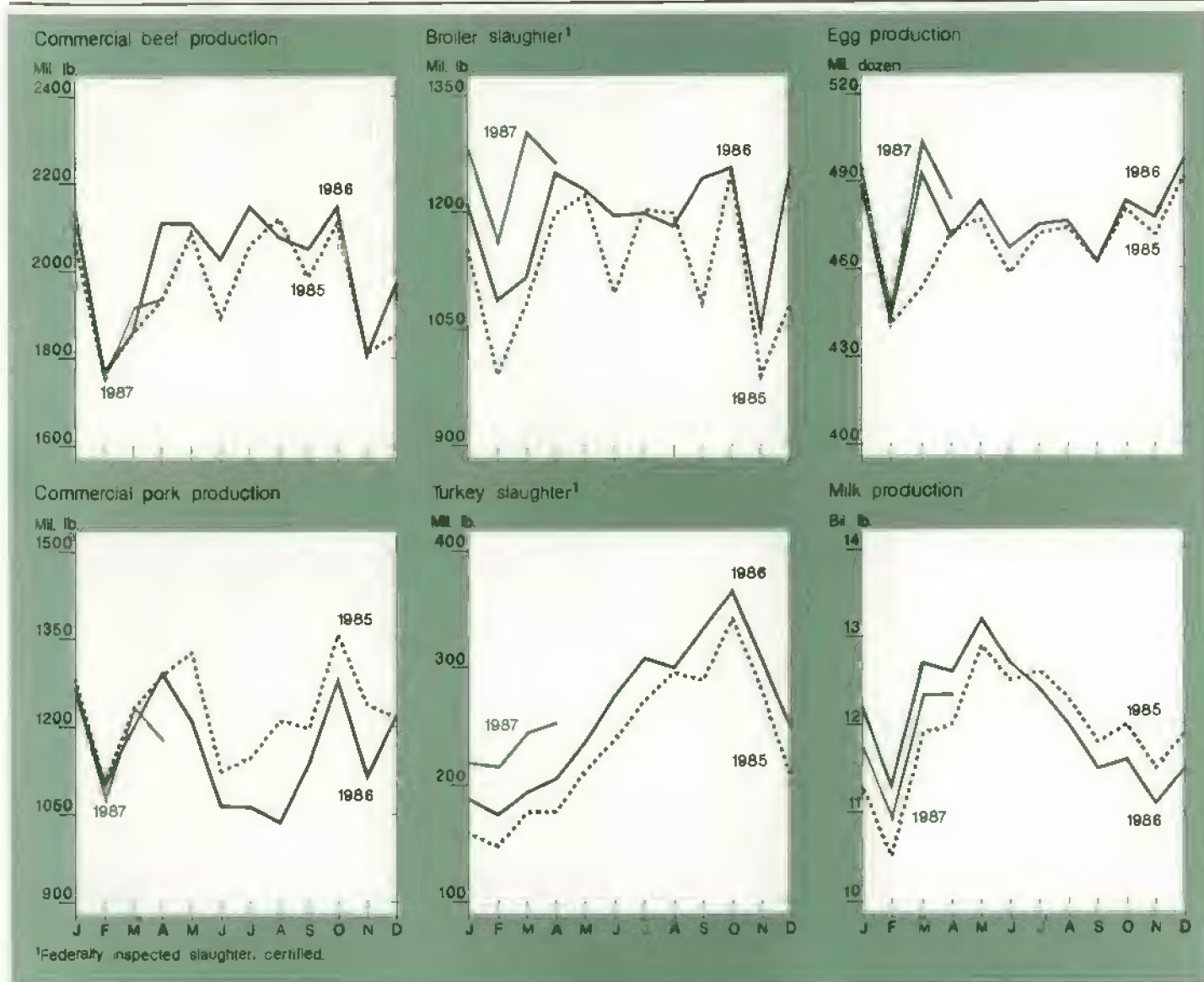
#### ***Beef Output Down, Prices Up***

Beef production in April-May was about 11 percent below a year earlier. Cattle slaughter was nearly 10 percent lower, and commercial dressed weights were 6 to 8 pounds below a year earlier.

Sharply lower dairy cow slaughter, as the end of the Dairy Termination Program (DTP) approaches, is the primary reason for lower beef production. Dairy cow slaughter in April was 44 percent lower than a year before and will remain down sharply through at least August. In addition, fast movement through feedlots and late-winter weather disruptions resulted in fewer cattle marketed and much lower slaughter weights in April and May. Weights likely rose in June as the weather impacts abated. In June, fed cattle marketings likely rose as fed cattle supplies increased and incentives to market cattle ahead of schedule remained strong.



# Production of Livestock and Products



Cattle on feed in the seven monthly reporting States on June 1 were 6 percent above a year before, the second year-to-year increase since October. However, this inventory was still 4 percent below the 1972-86 average for the date. Fed cattle marketings in May were down 7 percent, the lowest for this period since 1982. Net feedlot placements remained large, 12 percent above a year earlier and the largest May placement since 1978. February through May placements were 11 percent above last year's pace, and should result in summer marketings and slaughter weights near a year earlier.

Prices for Choice fed steers in Omaha averaged about \$66.50 per cwt in April, up \$5 from March and \$13 from a year earlier. Prices in May likely averaged near \$71, with prices remaining near \$70 in early June.

Higher fed cattle prices were being passed on to consumers in April and May. Retail prices for Choice beef in April averaged \$2.37 per pound, up from \$2.34 in March and \$2.27 the year before. The farm-to-retail spread has declined since the first of the year and averaged \$0.93 in April, the lowest since November 1985. Much of the additional fed cattle price rise through mid-June will be reflected in higher retail beef prices through early summer.

Broiler supplies are already large, and pork expansion is likely this summer; these larger supplies of competing meats at lower prices likely will hold down retail beef price gains, putting downward pressures on cattle prices. However, though declining, prices are expected to remain well above the low levels of a year earlier. In addition, beef promotion activities, closer trimmed meat cuts, and lower beef supplies will help support prices.

## Dairy Removals Down

Declines in milk production, growth in commercial use, and rebuilding of commercial stocks caused Government dairy purchases to fall this spring (tables 12 and 14). Only 1.2 billion

pounds, milk equivalent, were purchased in April-May, little more than a third of last year's level. These removals were smaller than in recent history, running closer to 1977-79 levels.

April-May purchases were limited to areas of residual supply. Little butter was purchased except in the West. Little cheese was purchased outside the Midwest. Nonfat dry milk purchases were very small except in the West and Midwest. Last year at this time, purchases of all three products were widespread. In addition, purchases of each product have declined in each region. These patterns indicate that merchandisers have adjusted fairly well to 1987's tighter dairy markets.

The June onset of seasonal declines in milk production sets the stage for seasonal rises in wholesale prices which have begun for butter. By early summer, Government purchases are expected to be small, and prices of most products likely will have started to rise. Some seasonal wholesale price rises are likely for most dairy products, with butter increasing the most and nonfat dry milk prices increasing the least. If commercial stocks are rebuilt as expected, increases in wholesale dairy prices will start relatively early. But, they may not quite match those of 1986.

**For further information, contact:** Ron Gustafson and Richard Stillman, cattle; Leland Southard, hogs; Mark Weimer, poultry and eggs; and Jim Miller, dairy; (202) 786-1830.

## Field Crop Overview

Spring planting conditions for the major field crops were favorable in most major producing regions. Planting progress for all crops was above normal from late April through May, particularly for corn, soybeans, and spring wheat. Years when plantings are ahead of schedule usually produce above-average yields.

From April 26 through May 10, 63 percent of the corn crop was planted, compared with an average 36 percent for this period. By May 17, 93 percent of the corn crop was in the ground. This was in contrast to a 67-percent historical average and 76 percent in 1986, when yields reached a record

119.3 bushels per acre. Development of the crop through late May was ahead of average.

Soybean plantings were ahead of normal as well, especially in the Corn Belt, where beans usually are planted earlier than in most Southern States. Through June 7, 85 percent of the soybean crop was planted, compared with 71 percent last season and 68 percent on average. In Illinois, Indiana, Iowa, and Minnesota, 95 percent or more of the crop was in the ground by June 7, compared with averages of 70 to 85 percent.

Plantings were ahead of schedule in most Southern States, but by smaller magnitudes. Much of the national reduction in soybean plantings this season is in Southern States, where yields generally are lower. This, combined with favorable weather, could boost national average soybean yields.

By May 17, virtually all of the spring wheat crop was planted, in contrast to a 76-percent average and 63 percent last season. About 96 percent of the spring wheat had emerged by May 31, compared with an 81-percent average. All of the crop had emerged by May 24 in Idaho, Minnesota, and South Dakota.

Through early June, growers in most States reported the winter wheat crop to be in good condition, with the exception of the northern Delta. Dry weather in Arkansas and the Missouri boot heel is slowing development there.

The winter wheat crop is estimated to be 1.58 billion bushels, up 4 percent from last season. Harvested area for winter wheat is expected to fall 10 percent to 38.9 million acres, but the national average yield is forecast to be up 15 percent from last season to 40.6 bushels per acre. Yields will be up in the 10 major producing States, with the exceptions of Montana with a constant yield of 32 bushels and Oklahoma with a drop from 29 to 27 bushels.

Through June 7, sorghum planting was 70 percent completed, compared with a 59-percent average. Nearly all of the rice crop has emerged, compared with an 87-percent average. Cotton plantings, however, were slightly below the 75-percent average, with plantings in Texas and Oklahoma behind schedule.

Heavy rains during late May and early June throughout the Plains, Delta, and much of the Midwest markedly

changed the market's outlook for crop development. Dry weather through mid-May allowed farmers to plant crops ahead of schedule. Rains thereafter improved conditions for crop emergence and development in areas experiencing below normal precipitation. As of early June, crop moisture conditions were still below normal in the Southeast and Far West. But, crop conditions generally were good for the major crops as of early June.

In mid June, however, hot dry weather prevailed throughout much of the Midwest, and raised concerns about development of the corn and soybean crops in the western Corn Belt. The commodity markets responded with higher prices for corn and beans.

## Generic Certificate Exchanges Jump

Generic certificate exchanges for corn and wheat, which picked up appreciably during March-May, soared to record levels during late May. Corn exchanges continue to be made almost solely by farmers, while much of the increase in wheat exchanges is by grain merchants acquiring CCC-owned stocks.

As of early June, \$2.64 billion of generic certificates were available for exchange through August. About \$6.7 billion of certificates were exchanged through June 3. Of these, 73 percent were exchanged for corn, 18 for wheat, and 4 for grain sorghum.

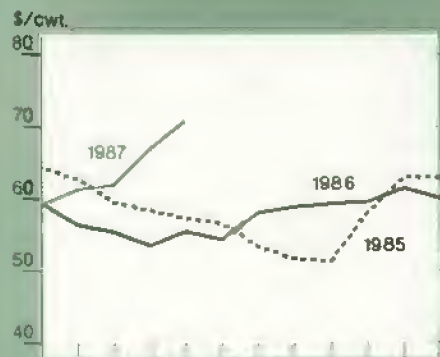
USDA recently announced additional certificate issuances for this summer. Payments of \$140 million will be made in certificates to farmers for increases in disaster payments on previously approved applications under the 1986 Disaster Program. And, \$804 million in certificates will be issued in June and July as 1987 final paid diversion payments for feed grains.

The recent surge in U.S. wheat sales to the Soviet Union comes from the EEP. The sales have caused the large jump in generic certificate wheat exchanges from CCC stocks. March-May exchanges from CCC-owned stocks totaled 47 percent of all wheat exchanges, up sharply from 12 percent in December-February. Wheat exchanges for March-May reached 241 million bushels, up significantly from December-February's 70 million and September-November's 88 million. Certificate exchanges for wheat should remain fairly strong through the summer quarter, if EEP sales for wheat

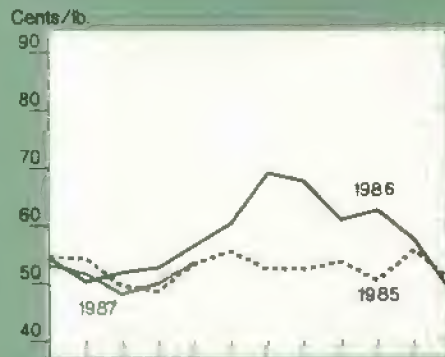


# Commodity Market Prices

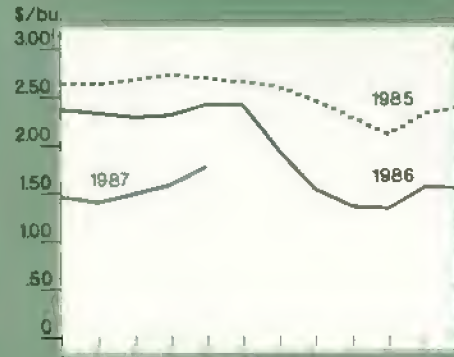
Choice steers, Omaha



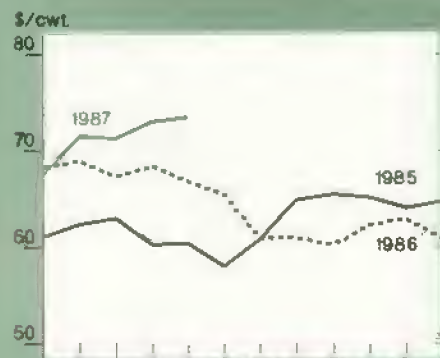
Broilers, 12-city average



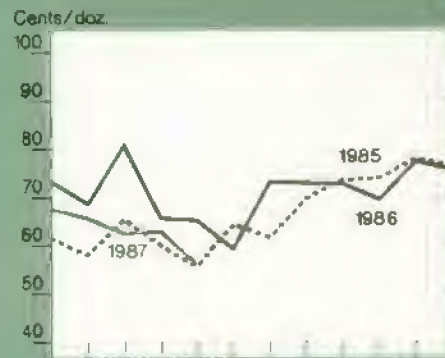
Corn, Chicago<sup>3</sup>



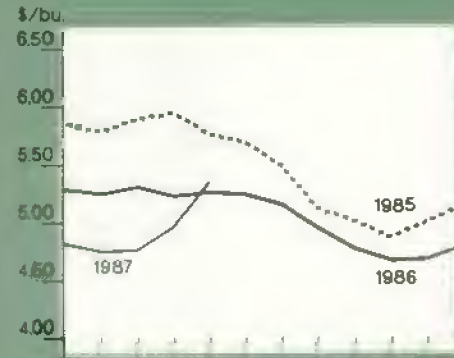
Feeder cattle, Kansas City<sup>1</sup>



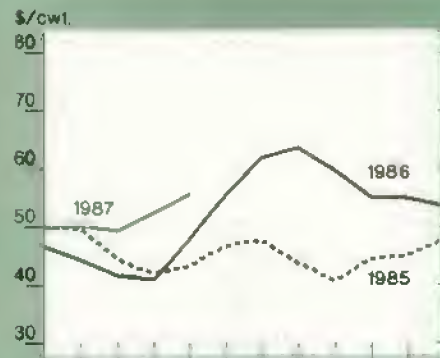
Eggs, New York<sup>2</sup>



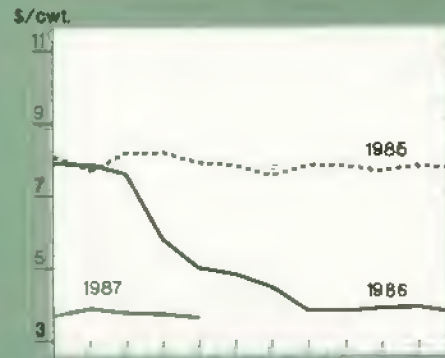
Soybeans, Chicago<sup>4</sup>



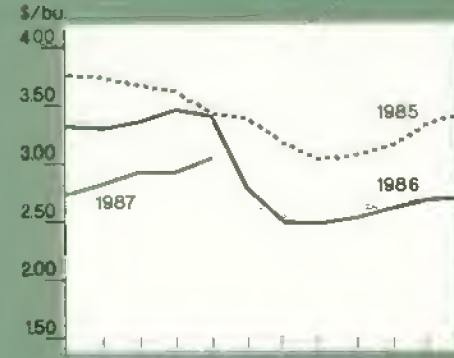
Barrows and gilts, 7 markets



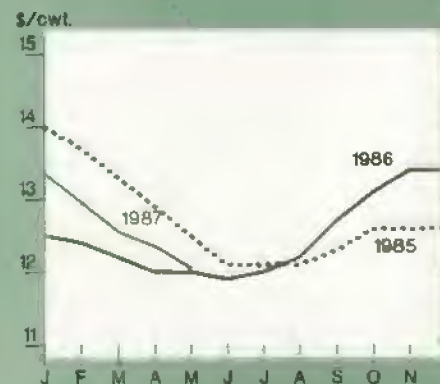
Rice (rough), SW Louisiana



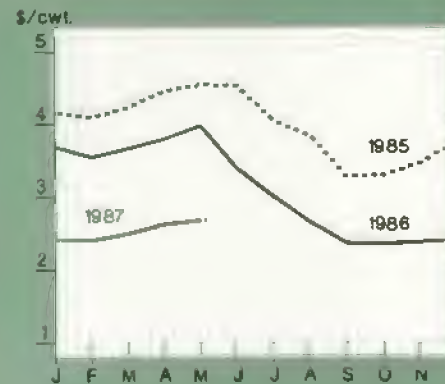
Wheat, Kansas City<sup>5</sup>



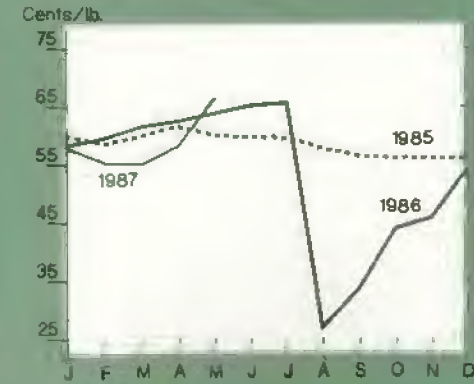
All milk



Sorghum, Kansas City



Cotton, average spot market



<sup>1</sup>600-700 lbs., medium no. 2. <sup>2</sup>Grade A Large. <sup>3</sup>No. 1 Yellow. <sup>4</sup>No. 2 Yellow. <sup>5</sup>No. 1 HRW.

# Generic Certificate Issuances

Item	\$ million
<b>ACTUAL 1/</b>	
Deficiency & diversion payments	6,689
Other	897
Total	7,586
<b>AUTHORIZED</b>	
(May-August 1987) 2/	
1987 advance deficiency & diversion payments	177
1987 final diversion payments	804
1987 Cons. Reserve Program	328
Export Enhance. & Targeted Export Assistance Programs	314
Disaster Payments	140
Total	1,762
<b>TOTAL, actual &amp; authorized</b>	<b>9,348</b>
<b>CERTIFICATE EXCHANGES</b>	
(April 1986-June 3, 1987)	6,713
<b>CERTIFICATE AVAILABILITY</b>	
(June-August 1987)	2,635

1/ Deficiency and diversion payment issuances through April 30, 1987, and other issuances through May 13, 1987.

2/ Remaining balances to be issued.

continue and if growers begin to place wheat under loan and to use certificates to immediately reacquire loan collateral if prices drop below the loan rate.

March-May corn exchanges averaged about 120 million bushels a week through May 13, but then rose to an average of 148 million during the next 3 weeks. Unlike wheat exchanges, virtually all corn exchanges were made from 9-month loans. March-May certificate exchanges totaled 1.64 billion bushels, significantly higher than exchanges made during September-November (344 million bushels) and December-February (751 million bushels).

## U.S. Food Grain Stocks Declining

The 20-percent increase in U.S. wheat exports expected for 1987/88 will offset lower feed use, causing all use to exceed increased production by 57 million bushels. Carryout for 1987/88 is forecast to fall for the second straight year, possibly to 82 percent of annual use, compared with 86 percent in 1986/87 (table 17).

For rice, which will have a smaller carryin than the year before, total use

should exceed output in 1987/88 and lead to a further reduction in carryout, from 62.6 million cwt in 1986/87 to 46.8 million cwt. Heavy enrollment in the 1987 wheat and rice acreage reduction programs should nearly offset higher yields for domestic food grains this season; this and rising exports will lower carryout for 1987/88.

## Foreign Wheat Output Dropping

Foreign wheat production is expected to decline 5 percent in 1987/88 (table 26). Most of the drop is likely to occur in the Soviet Union, which had poor weather last fall and winter. Both area and yields are down.

Foreign use may slip too, about 1 percent, largely because of an anticipated cutback in Soviet feed use. Consumption is expected to rise slightly in most major consuming countries, but in Mexico, Brazil, and Eastern Europe, smaller crops may depress use.

World wheat trade is forecast to expand 6 million tons in 1987/88 (July-June). Soviet wheat imports may reach 21 million tons, up from 17 million in 1986/87 but below the 28 million tons shipped in 1984/85.

China's imports may increase from 7.5 million tons to 9 million to support continuing consumption growth. This volume would be the largest since 1983/84, but well below the 13.8 million tons imported in 1980/81. Latin American imports are expected to rise slightly, and Egyptian, Moroccan, and Iraqi imports are forecast to expand.

The United States is expected to capture most of the growth in world trade. Poor weather and low prices have depressed Argentine production, and little recovery in output is anticipated this year. Exports are forecast to rise from the 1986/87 level of 4.5 million tons to 5 million, yet remain well below the 1983/84 record of almost 10 million tons.

Australian wheat area continues to contract in response to lower world prices, and stocks have been drawn down. Thus, exportable supplies are sharply lower. Exports may decline to 13.5 million tons from 15 million in 1986/87 and 16 million the year before.

With the initial price down, Canadian wheat area is 3 percent below the 1986 record. If yields are average, production will fall 5 million tons.

## Cumulative Generic Certificate Exchanges as of June 3, 1987

Commodity 1/	CCC Inventory	Producer loans	Total
<b>Food grains</b>			
Wheat			
Volume (mil. bu.)	170.2	325.2	495.4
Value (\$ mil.)	423.6	809.3	1,232.9
Rice			
Volume (mil. cwt.)	31.3	0.03	31.3
Value (\$ mil.)	105.3	0.11	105.4
<b>Feed grains</b>			
Corn			
Volume (mil. bu.)	124.7	2,863.6	2,988.3
Value (\$ mil.)	204.4	4,694.4	4,898.8
Grain sorghum			
Volume (mil. bu.)	34.0	127.8	161.8
Value (\$ mil.)	59.3	223.1	282.4
Barley			
Volume (mil. bu.)	33.4	86.3	119.7
Value (\$ mil.)	43.3	112.0	155.2
<b>Cotton</b>			
Volume (mil. bales)	0.81	5.57	6.38
<b>Rye, oats, soybeans</b>			
Value (\$ mil.)	14.6	24.0	38.6
<b>Total value (\$ mil.) 2/</b>	<b>850.5</b>	<b>5,862.8</b>	<b>6,713.3</b>

1/ Other Program commodities, for which few or no exchanges have been made, include honey, nonfat dry milk, butter, and cheese.

2/ Does not include values for cotton exchanges.

Sources: Agricultural Stabilization and Conservation Service, USDA.



However, massive stocks will allow exports to remain at 21 million tons.

Foreign rice area is forecast to remain near 1986/87, but improved yields are expected to raise production 2 percent. Early growing conditions indicate gains in most major producing countries. Foreign use likely will continue its trend of 1 percent annual growth.

Rice trade is down sharply this year; in 1986 Brazil imported 1.25 million tons of rice, and world trade reached 12.8 million tons. With Brazil absent from the market, trade is estimated at 11.8 million tons for 1987. Some recovery is forecast for 1988. The U.S. share of world rice trade is forecast to remain stable.

#### ***Foreign Production and Use Climbing for Coarse Grains***

Foreign coarse grain production may increase marginally in 1987/88 because of recovery in Western Europe, China, and Argentina (table 26). Foreign use is forecast to rise 3 percent. In China, use will increase about 8 percent to meet expanding demand. Mexico's use may rise 8 percent with larger feed and food consumption.

Consumption is expected to increase 3 percent in the Soviet Union. Elsewhere, use may rise only marginally. In many countries, livestock producers and other grain users are somewhat isolated from world prices; thus, response to low world prices has been and will remain limited.

World coarse grain trade is forecast to expand 2.6 million tons in 1987/88 (October-September) following the strong recovery of 1986/87. South Korean imports are expected to expand sharply as livestock feeding grows and corn replaces some feed wheat. Imports by North Africa and the Middle East, especially Saudi Arabia, continue to expand. Eastern Europe's imports likely will decline as use contracts. Brazil will import no corn because domestic supplies are adequate.

U.S. coarse grain exports are expected to recover further in 1987/88 because competitors have less to sell. In Canada, lower yields may cut production 2 million tons, and exports are forecast to decline from about 7.3 to 5.1 million tons. In China and Thailand, rising domestic consumption is reducing exports.

Argentine area and yields may increase in 1987/88, but expanded supplies will not be available until the second half of the trade year. Shipments may recover from 6.5 million tons estimated for 1986/87 to 8 million, well below the 11-million-ton average of the late 1970's-early 1980's.

Australian coarse grain area is likely to recover this year, and exports could rebound to about 4 million tons. In the European Community, domestic use continues to shrink; thus, larger production and the agreement for Spain to import 2.3 million tons of corn and sorghum from non-EC countries are expected to result in larger EC coarse grain exports.

#### ***U.S. Oilseed Supplies Shrinking***

U.S. oilseed production is expected to show a second consecutive annual decline in 1987/88, slipping 4 million tons. The Planting Intentions Report put domestic soybean acreage at 56.9 million acres, the lowest since 1976/77 and down 7.5 million from last year. Domestic farmers are expected to harvest 1.83 billion bushels this season, 9 percent below last year (table 17).

Total U.S. use of soybeans is expected to drop 3 percent to 1.9 billion bushels. Crushings are likely to rise slightly, but exports could fall 7 percent to 650 million bushels because of record world oilseed supplies. With disappearance projected to exceed production by 85 million bushels, carryout could fall to 495 million bushels, or 26 percent of annual use, compared with 30 percent in 1986/87.

Domestic oil use is forecast to rise 4 percent to 11 billion pounds this season. A 10-percent increase in poultry production and a 2-percent increase in pork production in 1987 should raise domestic soybean meal use by 3 percent, to 21.05 million short tons.

Foreign oilseed production rose 4 percent in 1986/87 because of record yields. Soybeans, with a 14-percent rise, accounted for most of the gain. The Brazilian soybean crop recovered from the 1985/86 shortfall, and China's production continues to expand. Poor vegetable oil prices dropped sunflower area sharply, but this decline was offset by higher yields. For peanuts, lower yields offset increased area. Rapeseed area and production expanded. Low cotton prices depressed cottonseed output.

Foreign oilseed crushings are estimated up less than 1 percent, following 2 percent growth last year. In the developed countries, crushings may rise 4 percent. Crushings are down substantially in Argentina, the Soviet Union, and China because of reduced supplies, but the Brazilian crush is rebounding. Food use of oilseeds is up about 5 percent, with gains in China and the developing countries.

World oilseed trade may increase 4 percent in 1986/87 and match the 1982/83 record. Protein meal trade is expected to increase 3 percent to a record high because of strong EC and Soviet demand. Canadian rapeseed exports may increase 30 percent. EC rapeseed exports are down, but sunflowerseed shipments are expanding.

EC oilseed imports are expected to be unchanged at 17.7 million tons in 1986/87, down from an average 19 million in the early 1980's. Imports in non-EC Western Europe likely will increase to about 4.5 million tons. East Asian imports are estimated at a record 9.8 million tons, and Mexican imports are expanding.

In 1987/88, production outside the United States is forecast to climb 5 percent if the weather is normal. Continued low prices likely will encourage expanded use.

#### ***Improved Prices Encourage Cotton Plantings***

World cotton production in 1987/88 is expected to rebound following the 13-percent drop in 1986/87. Foreign area is projected to expand, yields may improve, and foreign output could rise 6 million bales to 65.5 million. U.S. output may rise more than 2 million bales in 1987 to 12 million, short of the 13-million-bale level of 1984 and 1985 (table 17). Larger plantings are likely in China, Australia, India, and some African countries.

Foreign cotton consumption is estimated to be up 5 percent in 1986/87. Gains are occurring in most major consuming countries. In 1987/88, little expansion in foreign consumption is forecast because of a cutback in China; elsewhere, consumption may rise 3 percent. Following a large gain in 1986/87, U.S. mill use may decline marginally to 7.2 million bales. The U.S. export forecast for 1987/88, however, has been raised by 300,000 bales to 6.3 million, 5 percent below a year ago.

World cotton trade is expanding about 15 percent in 1986/87 to a record 23 million bales, exceeding the 1979/80 peak. U.S. exports have rebounded sharply. Shipments from Latin America, the USSR, and China are down substantially. Western Europe and East Asia are increasing their imports. In 1987/88, world exports are expected to be about the same.

[Michael Hanthorn (202) 786-1840 and Sally Byrne (202) 786-1691]

For further information, contact: Sara Schwartz, world food grains; Allen Schienbein, domestic wheat; Janet Livezey, rice; Peter Riley, world feed grains; David Hull, domestic feed grains; Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Bob Skinner, domestic cotton; Jim Schaub, peanuts. World information, (202) 786-1691; domestic, (202) 786-1840.

## High-Value Crop Overview

Fueled by the lower valued dollar and led by citrus, exports of most major fresh fruits are exceeding last year's by substantial margins. Through March, grapefruit exports were 41 percent above last season. Orange and lemon exports surpassed last year's by 8 and 23 percent, respectively. Exports of apples, pears, and cherries showed substantial gains. This strong export demand has been the major force boosting domestic prices.

USDA announced a \$53-million Targeted Export Assistance Program (TEA) allocation for fruit export promotion on April 21. More than \$17 million will go to citrus commodities.

### Citrus Production

Citrus production for 1986/87 is forecast at 11.7 million tons, 8 percent higher than last year. Orange production is expected to be up 3 percent; grapefruit, 8 percent; and lemons, 44 percent.

All orange production is forecast at 183 million boxes. The largest increases are in California, with navel production forecast up 4 percent and Valencia up 12 percent from 1985/86. Florida orange production will likely rise 1.8 million boxes to 120.8 million.

A 6-percent larger crop in Florida and a strong recovery from the 1983 freeze in Texas accounted for the 8-percent increase in grapefruit production.

Texas will produce nearly 1.9 million boxes in 1986/87, compared with none 2 years ago.

After decreasing for 2 months, grower prices for fresh and processing fruit advanced in May. The May grower price index rose 3.8 percent from April and 5.5 percent above a year ago mainly because of increased prices for oranges, apples, and strawberries. However, larger remaining supplies of apples and oranges than at this time last year and increased production of summer fruits likely will moderate the seasonal increase in fruit prices this summer even though demand will remain strong.

### Spring Potato Production Down

Spring potato production is estimated at 19 million cwt, down 4 percent from last year and 17 percent below 1985. Area for harvest was 79,100 acres, up 4 percent from last year. Poorer yields in most States accounted for the downturn.

Potato prices should remain above a year ago through early summer. In addition to the smaller spring crop, remaining 1986 crop potato stocks are lower than at the same time last spring, although they are above 2 years ago. U.S. potato prices in May averaged \$6.93 per cwt, compared with \$4.39 a year earlier.

### 1986 Tobacco Crop Smallest in 50 Years

Total U.S. tobacco production fell to 1.17 billion pounds in 1986, down 23 percent from 1985 and the smallest since 1936. Flue-cured production fell 19 percent and burley 29. Both yields and acreage shrank from 1985.

Despite the small crop, grower prices fell 12 cents a pound to \$1.525. Support levels were lower than for 1985/86, and total supplies were ample because of large carryin stocks. In addition, declining demand for tobacco products depressed prices.

This year, tobacco production is likely to increase about 5 percent from 1986. Effective quotas rose for both burley and flue-cured, and growers are expected to plant about 4 percent more acreage than last year. Even with higher production, the tobacco supply for 1987/88 may slip 6 to 8 percent because of lower carryin stocks.

The price support for flue-cured tobacco is down 0.3 cents per pound in

1987, while the support for burley remains unchanged. Supports for other types of tobacco are expected to be lower this year.

### Sugar Deliveries Show Signs of Turnaround

Sugar deliveries in first-quarter 1987 rose 5 percent from a year earlier. This represents the first quarter-over-quarter rise since 1981. Increasing deliveries for bakery and cereal products, confectionery products, and multiple food uses more than offset lower demand for sugar in dairy products and beverages.

Sugar deliveries for nonindustrial use rose 4 percent, as higher deliveries for the wholesale grocery industry (up 10 percent) offset declines in all other categories. If the strong demand continues, U.S. sugar deliveries for the year may rise slightly.

First-quarter sugar prices for raw cane sugar averaged 21.7 cents a pound, 4 percent higher than first-quarter 1986, and only slightly below the 1986/87 market stabilization price of 21.78 cents. This is the highest quarterly average since third-quarter 1984. Prices likely will continue to strengthen for the rest of the fiscal year, because sugar stocks are expected to tighten relative to demand.

Prices of high fructose corn sweetener (HFCS) plunged in 1987 to their lowest levels in 7 years. Lower net starch costs and slowing consumption growth are the major causes. HFCS-55 prices in the Chicago-West market averaged 17.1 cents a pound (dry basis, delivered) in first-quarter 1987, down from 20.7 cents the quarter before. In early May, prices were about 16 cents a pound, compared with 19.1 cents in May 1986. HFCS-42 prices dropped to about 14 cents in May. [Glenn Zepp (202) 786-1770]

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## Commodity Spotlights

### Cow-Calf Net Returns and The Beef Cattle Inventory

Poor returns, drought, structural adjustments, and record large meat and poultry supplies during the 1980's resulted in sharply reduced cattle inventories. The cattle and calf inventory on January 1, 1987, was the lowest since 1962, but it now appears to be stabilizing.

Net returns for cow-calf enterprises reflect the relative profitability of the cow-calf industry and are often used to explain changes in the beef cattle inventory (the cattle cycle). Cow-calf production is the first stage of the rather lengthy process resulting in retail beef. About 2-1/2 years elapse between the breeding of beef cows and heifers and the time when that beef is retailed.

A decision by cow-calf producers to expand production occurs when they retain and breed heifers that would otherwise have been available for slaughter. This causes beef production to decrease in the short run, as animals are retained for the breeding herd in order to increase production 2 to 4 years later.

Conversely, to reduce production, cow-calf producers normally retain fewer heifers for breeding or cull more brood

cows than if output were to be maintained. Slaughter of these additional cattle causes beef cattle output to increase in the short run before declining as inventories stabilize at lower levels.

### Cow-Calf Production Expenses Peaked in 1984

Since 1977, ERS has published annual cost-of-production (COP) budgets for U.S. beef cow-calf production by operation size and region. The budgets appear in *Economic Indicators of the Farm Sector: Cost of Production*. These budgets estimate returns per cow as either cash receipts less cash expenses, or cash receipts less cash expenses and capital replacement costs. The measures are in current dollars.

The figure for cash receipts less cash expenses indicates money available for living expenses, replacement machinery, equipment and buildings, debt repayment, or the financing of other farm enterprises. Inclusion of capital replacement charges shows whether returns are sufficient to sustain production over a longer period of time.

Cash receipts for average U.S. cow-calf enterprises are comprised of sales of steer and heifer calves, yearling steers and heifers, and cull cows. Cash receipts of about \$262 per cow in 1986 were 79 percent above 1976. Rapid escalation of feeder cattle prices in late 1978 and 1979 resulted in total receipts reaching an 11-year high of \$352 per cow in 1979. Receipts are expected to rise near \$280 per cow in 1987, \$20-30 over the 1981-85 average.

Cash expenses are more variable from area to area than receipts, partially because of the differences in the cost of providing forage for grazing, the principal feed source in cow-calf production. In addition, abnormal weather may cause forage productivity and costs to vary drastically.

Total cash expenses stood at \$164 per cow in 1977, and peaked at \$277 in 1984. Feed costs increased by 45 percent, other variable expenses rose by 63 percent, and fixed expenses more than doubled during the same period. Lower feed and fixed expenses have dropped total cash expenses \$27 in 1985 and another \$23 dollars in 1986. Expected increases in feed, other variable expenses, and fixed expenses

could increase total cash expenses by \$7 per cow for 1987, but the total will still be well below the early 1980's.

### Net Cash Returns Expected To Improve

Cash receipts less cash expenses (net cash returns) were negative 5 of 10 years during 1977-86, but averaged near \$11 per cow in 1978-80. Net cash returns were negative from 1981 until 1984, when feed costs rose and cash receipts fell. Net cash returns improved to just above breakeven levels in 1985, continued to rise in 1986, and are expected to improve for 1987, sustained by higher receipts and reduced feed costs.

Capital replacement costs reflect the returns needed to replace and maintain the buildings and equipment used to produce feeder cattle. During 1977-86, cash receipts exceeded cash expenses and capital replacement only during 1978-80. In the past, farmers may have been able to partially absorb any cash shortfall through rising land values or mineral income. However, recent declines in land and mineral prices have put added financial pressure on cow-calf enterprises to maintain at least a breakeven cash flow.

### Net Returns Affect Herd Liquidation

The direction of net returns and their magnitude are often used to help explain the changes in beef cattle numbers. However, production changes, in reaction to net return changes, occur slowly. If producers decide to increase feeder cattle output, perhaps in response to a couple of years of positive net returns, the additional calves will be ready for sale 18 to 24 months later.

Initially, feeder cattle supplies are reduced as additional heifers are retained for the breeding herd. Conversely, when producers attempt to reduce output, the extra heifers are offered as feeder cattle, rather than kept as breeding herd replacements. This causes a temporary increase in the feeder cattle supply before the eventual decrease in beef cattle numbers.

The time lag involved for response to changes in net returns is exemplified by actions in 1975, when beef cow-calf producers began to liquidate beef cow herds. The beef cow inventory was 45.7 million head on January 1, 1975, then dropped to 43.9 million in 1976

U.S. Cow-Calf Production Costs, Per Cow, All Sizes, 1977-87

ITEM	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987E
Dollars											
Total receipts	146.91	244.55	352.30	306.91	260.64	255.48	247.18	258.78	254.39	262.48	278.88
Feed expenses	83.81	85.65	90.58	102.70	114.01	113.94	113.72	121.77	114.25	99.93	102.52
Other variable expenses	39.54	43.22	50.25	59.23	66.01	67.49	67.43	64.57	65.42	60.44	62.50
Total variable expenses	123.35	128.87	140.83	161.93	180.02	181.43	181.15	186.34	179.67	160.37	165.02
Fixed expenses	40.96	59.98	90.33	89.96	85.16	85.77	87.65	90.19	70.04	66.41	68.83
Total cash expenses	164.31	188.85	231.16	251.89	265.18	267.20	268.80	276.53	249.71	226.78	233.95
Replacement cost	34.60	37.39	46.74	54.19	59.22	62.88	64.28	64.46	64.53	63.69	70.55
Total cash & replacement expenses	198.91	226.24	277.90	306.08	324.40	330.08	333.08	340.99	314.24	290.47	304.50
Receipts less cash expenses	-17.40	55.70	121.14	55.02	-4.54	-11.71	-21.62	-17.75	4.68	15.70	48.03
Receipts less cash & replacement expenses	-52.00	18.31	74.40	0.83	-63.76	-74.59	-85.90	-82.21	-58.85	-27.99	-25.52
Thousand head											
Beef cow inventory, January 1	41,443	38,738	37,062	37,107	38,773	38,230	37,940	37,494	35,370	33,633	33,910

after negative net returns in 1974-75. Receipts were \$22 below cash expenses in 1974 and \$42 below in 1975. A loss of \$38 per cow occurred in 1976, and herd liquidation continued.

Although returns remained negative, improvement caused the liquidation to slow in 1977. Favorable returns of \$56 per cow in 1978 and \$121 in 1979 resulted in some producers' retaining heifer calves to increase production. However, the decline in beef cattle numbers continued until 1979 when some of the 1978 heifers calved and entered the beef cow herd.

The 3-year expansion in cattle numbers at the beginning of 1979 was very short by historical standards. Net returns peaked in 1979, and continued to be positive in 1980. Lower feeder cattle prices and higher cash expenses resulted in cash net returns' falling below breakeven in 1981. Continued negative returns for 1982 caused cow-calf enterprises to start liquidating. Negative returns and liquidation continued in 1983 and 1984. In 1985, near-breakeven returns and improved forage conditions caused herd liquidation to level off.

Positive returns near \$36 per cow in 1986 and projected favorable returns in 1987 may encourage cow-calf producers to expand their beef cow herds and take advantage of abundant forage supplies. However, the incentives are not present, as 1986 was the first year of substantial positive cash net returns since 1981. By 1988, large

pork and poultry meat supplies may reduce net returns, limiting additional expansion in the beef cow herd. [Russell Bowe (202) 786-1821]

#### Meal Sales Drive Exports Of U.S. Oilseed Products

Soybean meal shipments through the first half of fiscal 1987 ran more than one-third ahead of last year's pace. This gain occurred despite a drop in the value of total U.S. agricultural exports and overall U.S. oilseed and oilseed product sales.

At a time when export increases often are attributable to Government programs (Export Enhancement, marketing loans, etc.), the surge in U.S. soybean meal exports was nevertheless the result of market forces: global demand for meal remained strong at a time when U.S. competitors had low supplies. In the first half of fiscal 1987, Southern Hemisphere supplies of soybeans and soybean meal were inadequate to meet continued strong global demand, particularly in the EC, where poultry and hog numbers were rising. A severe winter in Western Europe prolonged the strength of EC demand for soybean meal.

When the current fiscal year began last October, the United States had just harvested its soybeans and had large bean and meal stocks. In contrast, little soybean meal was available elsewhere. In Brazil, the world

largest exporter of meal, the soybean crop harvested in February-March 1986 was down 4.2 million tons. Paraguay's crop was off 350,000 tons. These shortfalls more than offset a 550,000-ton increase in the Argentine crop.

By October 1986, much of the Brazilian and Argentine crops had already been exported. Consequently, Brazilian and Argentine meal sales during October 1986-March 1987 fell 13 and 5 percent, respectively, from a year earlier.

However, since February 1987, South America has begun to regain its competitiveness. The combined new crops of Argentina, Brazil, and Paraguay are 3.4 million tons larger than last year. As a result, the pace of U.S. soybean meal exports will decline in the second half of the season.

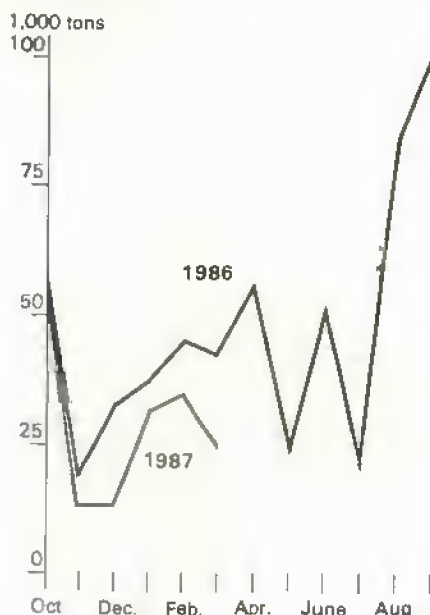
Preliminary mid-May trade data indicate that almost 50 percent of U.S. soybean meal was taken by the EC, traditionally the largest U.S. market. Another 32 percent of sales were made to Canada, Eastern Europe, Venezuela, Egypt, Iraq, and Mexico.

One major importer missing from this list is the Soviet Union, which has not purchased U.S. soybean meal since 1979. During the 1980's, the Soviets generally purchased pelletized meal from Brazil and Argentina; the pellets

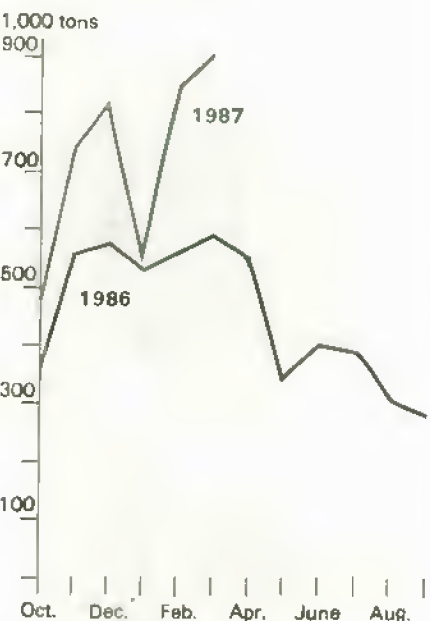


carry less risk of damage from careless handling. The USSR is expected to more than double its global imports of soybean meal this season, to 1.5 million tons.

So Far, U.S. Soybean Oil Exports Are Below 1986...



... While Meal Exports Are Running Higher



By year's end, U.S. soybean meal sales likely will approach 6.4 million tons, 16 percent higher than in 1985/86. The outlook for U.S. meal exports in 1987/88 is less bright than the first-half numbers indicate, though, because of the good supply of meal now available from Southern Hemisphere producers. U.S. soybean meal sales for 1987/88 are currently projected to fall 17 percent.

U.S. soybean sales were also strong in the first part of 1986/87. However, foreign demand for beans was not as vigorous as that for meal. Importers in general, and the EC in particular, had carried in relatively large stocks of vegetable oils and obtained additional oil from bigger domestic oilseed crops, including soybeans.

The EC took 48 percent of U.S. soybean exports through mid-May. Japanese purchases accounted for another 19 percent. Japan is slightly behind last year's pace because of its increased rapeseed purchases from Canada and slower domestic poultry growth.

The Soviet Union, which ranked fourth among purchasers of U.S. soybeans in 1985/86, has not contracted for any U.S. soybeans to date. This year, the Soviets are expected to reduce their global soybean imports almost one-half because of increased rapeseed imports and a preference for oilseed meal.

Total 1986/87 U.S. soybean exports are projected to decline by 1.1 million tons to 19.1 million. In 1987/88, U.S. soybean exports are forecast to fall 7 percent, reflecting greater anticipated competition from South America, larger EC soybean output, and reduced U.S. supplies.

Soybean oil exports are forecast to decrease 12 percent to 500,000 tons in 1986/87. As of mid-May, U.S. soybean oil exports were running 37 percent behind last year.

A large percentage of the soybean oil exports anticipated during the second half of the year will be under P.L. 480 (Food for Peace) and GSM (Export Credit Guarantee) programs. This financial assistance is expected to continue into 1987/88. [Tom Bickerton (202) 786-1691]

## Idling of Cropland Continues with 1985 Farm Act

Total cropland devoted to the 15 major U.S. field crops increased steadily from 1976 to 1983, and thereafter has plateaued at around 310 million acres. Since 1982, however, the mix of planted and set-aside land has changed. Area planted to the seven program crops and eight major non-program crops<sup>1</sup> has generally trended downward, while total area idled by Government programs has risen.

The 1981 Farm Act implemented acreage reduction programs for 1982-85 and cropland was idled initially in 1982. The 1985 Farm Act continues authorization to implement acreage reduction programs through 1990, authorized voluntary paid diversion for feed grains, and established the Conservation Reserve Program (CRP) to idle highly erodible cropland for 10 years.

Total cropland for the 15 major crops includes plantings to program and nonprogram crops, area idled in annual commodity programs, and area idled in the CRP during 1986 and 1987. For winter wheat and rye, harvested area is reported to eliminate double counting of plantings that were enrolled in subsequently announced acreage reduction programs. USDA only reports harvested area for tobacco and sugarcane.

From 1976 to 1981, total cropland use rose as farmers increased plantings in response to growing export markets. A good share of the increase was in soybean plantings, which jumped from about 50 million acres in 1976 to 67.5 million in 1981. As U.S. agricultural exports declined in the 1980's, participation in Government programs rose and plantings fell, as rising target prices mandated by the 1981 Farm Act protected program participants from weakening markets. Participants are required to idle acreage to receive price and income support payments.

<sup>1</sup> Program crops (those that have acreage reduction programs) include wheat, rice, corn, grain sorghum, barley, oats, and cotton. Nonprogram crops include soybeans, tobacco, peanuts, rye, sugar (beet and cane), flaxseed, dry edible beans, and sunflower.

# U.S. Cropland for the 15 Major Field Crops

## Plantings \*

Year	Pro-gram total	Corn	wheat	Non-program total	Soy-beans	Idled by annual programs	CRP	Total
Million acres								
1976	214.9	84.6	72.2	59.2	50.3	NA	NA	274.1
1977	213.1	84.3	67.7	69.3	59.0	NA	NA	282.4
1978	197.6	81.7	56.9	75.2	64.7	18.2	NA	291.0
1979	198.7	81.4	63.0	84.2	71.4	13.0	NA	295.9
1980	213.8	84.0	74.6	81.4	69.9	NA	NA	295.2
1981	222.5	84.1	81.2	79.5	67.5	NA	NA	302.0
1982	214.3	81.9	78.3	83.0	70.8	11.1	NA	308.4
1983	166.2	60.2	61.7	73.5	63.8	77.9	NA	317.6
1984	203.4	80.5	67.3	78.8	67.8	27.0	NA	309.2
1985	207.0	83.3	65.8	73.1	63.1	30.7	NA	310.7
1986	193.5	76.7	61.3	70.8	61.5	45.2	2.0	311.5
1987F	174.3	67.6	55.5	65.9	56.9	54.4	17.0	311.6

\* Harvested area for winter wheat, rye, tobacco, and sugarcane in all years. NA = not applicable.

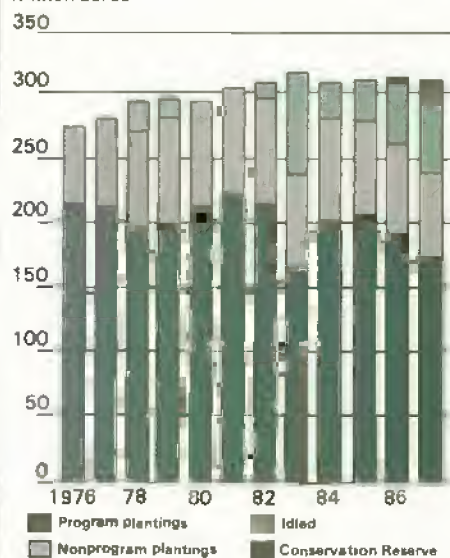
Area planted to the seven program crops peaked at about 223 million acres in 1981, and is expected to be down to 174 million this season. Much of the decline has been for wheat and corn, with wheat dropping about 26 million acres and corn 16.5 million. In addition, rice plantings have fallen about 40 percent since 1981 and are expected to total only 2.32 million acres this season.

Total cropland—planted and idled—for the 15 major crops has remained stable at 308 to 312 million acres since 1982, with the exception of 1983 (the PIK year). That season, 78 million acres of idled land pushed the total to about 318 million acres. Excluding 1983, the annual gain in total area idled since 1982 (including area placed in the CRP in 1986 and 1987) has approximated the annual reduction in program plantings, keeping total cropland fairly constant.

A major goal of the 1985 Farm Act is to move U.S. agriculture in a more market oriented direction through 1990/91. Given low market prices, producer participation in most Government programs has been heavy in 1986 and 1987, and it is expected to remain so through 1990. Most programs likely will continue to require participants to idle a significant share of base acreage to be eligible for benefits, particularly while stocks remain excessive. Additionally, the CRP is mandated to idle approximately 45 million highly erodible acres by 1990.

## As Idled Acreage Increases, Field Crop Plantings Fall\*

Million acres



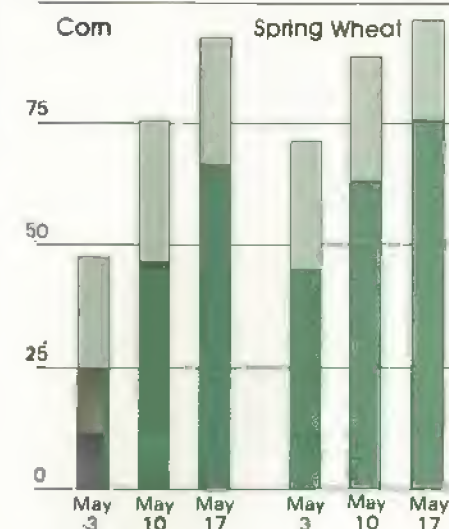
\*Plantings of 15 major field crops.

Initial estimates for 1987 show that area devoted to the 15 major field crops is expected to total about 312 million acres, basically unchanged from 1982-86 (excluding 1983). Planted area is expected to fall 24 million acres. Area idled by acreage reduction and diversion programs is expected to jump 9.2 million acres, and area placed in the CRP will see an above-target 15-million-acre increase.

Plantings are falling because of heavy enrollment in 1987 acreage reduction programs and the 15-percent voluntary diversion program for feed

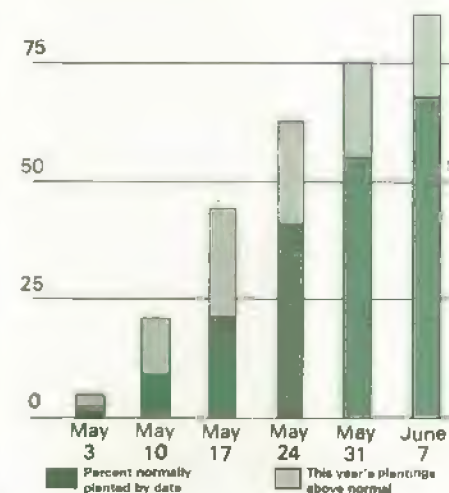
## Plantings Are Well Ahead of Normal for:

Percent planted 100



100

## ...and Soybeans



grains. Also, acreage reduction requirements for wheat and feed grains have increased. Area idled by 1987 programs is expected to total 54.4 million acres, or 17.5 percent of the cropland devoted to the 15 major crops.

In addition, 17 million acres were placed in the CRP through April 1987, representing 5.5 percent of total cropland. The 24-percent share of total cropland taken out of production by all programs nearly equals the 24.5 percent idled by the PIK program in 1983. [Michael Hanthorn (202) 786-1840]



## Irradiation Awaits The Test of the Market

This past fall and spring, shoppers in Miami and Los Angeles were offered mangoes and papayas labeled with a small green symbol. The Puerto Rican mangoes and Hawaiian papayas had been irradiated to sterilize fruit flies and satisfy U.S. quarantine requirements—the first test marketings of irradiated food in the United States.

In April 1986, the U.S. Food and Drug Administration (FDA) issued its first blanket approval of low-dose irradiation to control insects and extend the shelf life of foods. FDA had given its permission a year earlier for irradiation of pork to control the parasite that causes trichinosis.

Other foods previously approved by FDA for irradiation are wheat, wheat flour, potatoes, and spices and vegetable seasonings. However, only spices are routinely treated in the United States. Of spices sold, less than 5 percent are irradiated, mainly for use in processed foods.

Although irradiated foods are exposed to ionizing radiation, the foods themselves do not become radioactive. The radiation sterilizes or kills insect and microbial pests by damaging their genetic material and forming substances toxic to the pest. Irradiation also slows ripening and sprouting in fresh fruit and vegetables by interfering with cell division.

### Low Doses Sterilize Insects

The effects of irradiation depend on the dose absorbed, usually measured in kilorads (krads). Doses under 100 krads can sterilize insects in harvested produce and grain; delay sprouting of potatoes, onions, and other root crops; slow ripening of tropical fruits; and inactivate the pork parasite that causes trichinosis.

Medium doses (100 to 1,000 krads) can extend the shelf-life of fresh meats, fish, and a few fruits by reducing micro-organisms that cause spoilage. Disease-causing micro-organisms, such as salmonellae, are also killed.

FDA has not approved medium doses, but the agency is reviewing a USDA petition to use 150 to 300 krads to reduce pathogens in poultry. Except for spices, the high doses needed to

sterilize packaged foods for unrefrigerated storage (2,300 to 5,700 krads) are not allowed for commercial use.

Irradiation achieves its effects without raising the temperature of the product significantly. Thus, fresh meats and fish can be irradiated for disease control or longer shelf-life and stay fresh. Irradiation-sterilized meats and seafood have superior texture and maintain nutritional contents comparable to conventional canned foods.

Agricultural chemicals are facing increasing regulatory pressures concerning residues and worker exposures. Irradiation offers an alternative to chemical fumigants and sprout inhibitors. For spices, irradiation preserves flavor and color better than the alternative treatments of heating and gassing.

Irradiation's other food uses include nitrite reduction for bacon, beef tenderization, shortening rehydration time and improving quality for dehydrated foods, and speeding the aging of red wines.

### Irradiation Costs, Food Damage Are Problems

A major problem with food irradiation is that often the dose needed to kill the insect or microbial pest damages the food. Medium doses may soften and pit fruits and vegetables, and create off-flavors and odors in radiation-sensitive meats, especially turkey. Irradiation leaves no protective residues, so proper packaging and refrigeration are needed.

Economic factors pose another hurdle. Irradiation is capital intensive, requiring a minimum investment of around \$1 million per new facility. An ERS analysis found that an irradiation facility must treat 30 to 50 million pounds of food a year to bring costs down to 1-1/2 to 2 cents per pound. With larger volumes, unit costs would be lower. The ERS estimates are for hypothetical facilities designed to treat a specific food. Spices are currently irradiated in contract facilities which treat a variety of products for a fee.

Irradiation must compete with existing preservatives and fumigants by offering a superior service or a lower cost treatment. Preliminary comparisons show irradiation to be more costly than chemical treatment. ERS estimates that irradiating papaya runs 1 to 4 cents per pound, higher than the

reported 0.3 to 2.3 cents per pound for chemical fumigation.

However, changes in consumer preferences or in food safety regulations could alter the economics of irradiation. The Environmental Protection Agency's 1984 ban on ethylene dibromide (EDB) as a post-harvest fumigant left growers in Hawaii and Florida scrambling for an alternative to satisfy the quarantine requirements imposed on papaya and citrus.

### The Ultimate Test: Consumer Acceptance

Uncertainty about consumers' reactions to irradiated foods has dampened the interest of many potential users. Companies are reluctant to risk the reputation of their brand names by associating them with the process. Although shoppers in the two test markets were generally favorable toward the irradiated fruit, opponents of irradiation picketed the sales.

As knowledge of radiation chemistry and experimental information accumulates, regulators seem to be increasingly satisfied that foods irradiated at low doses are safe to eat. The technique still awaits the ultimate test of the marketplace. [Rosanna Mentzer Morrison (202) 786-1864]

### Upcoming Economic Reports

Summary Released	Title
<b>July</b>	
7	Sub-Saharan Africa
9	World Ag. Supply & Demand
17	Agricultural Outlook
20	Dairy
22	World Food Needs & Availabilities
23	Oil Crops Yearbook
29	Fruit Yearbook
<b>August</b>	
5	Livestock & Poultry
11	World Ag. Supply & Demand
12	Farm Income
13	Agricultural Resources
14	Cotton & Wool Yearbook
18	Econ. Indicators of the Farm Sector
19	Agricultural Outlook
20	Exports
	Foreign Ag. Trade of the U.S.
21	Feed
26	Dairy Yearbook
27	South Asia
31	Vegetable



## World Agriculture & Trade

### U.S. EXPORT OUTLOOK

U.S. agricultural export volume is expected to rise 18 million tons in fiscal 1987, the first increase in 7 years. Until recently, little growth was foreseen for export volume, and export value was expected to fall. But reduced competitor grain supplies and a surge in demand boosted the 1987 export forecast about 13 million tons between February and May.

The forecasts for U.S. agricultural exports in fiscal 1987 now stand at 127.5 million tons and \$27.5 billion. Compared with 1986, export volume is expected to climb 16 percent, and value 5 percent (table 30).

Exports of corn, wheat, sorghum, barley, cotton, and horticultural products are all expected to rise in volume. Lower prices and increased use of the EEP are boosting wheat and barley exports, while corn sales will be buoyed by reduced supplies in Argentina, lower prices, and increased overseas demand, especially in East Asia. However, lower prices are expected to more than offset the increased volume of grain exports; the value of oilseed and product exports is also expected to fall.

Increased cotton, livestock, and horticultural exports account for virtually all of 1987's expected gain in value.

This gain is in part because the lower value of the dollar led to lower domestic prices for livestock and horticultural products in countries that import them.

### *Soviets Increase Purchases From United States*

In addition to reduced competitor export prospects, much of the improvement in the U.S. export forecast reflects increased sales to the Soviet Union. The Soviets' grain purchases are highly variable from year to year. For example, they rose 71 percent to a record 55 million tons in 1984/85, then fell to 29 million tons the following year.

In 1986/87, the Soviets' increased use of "intensive technology," changes in procurement prices and specifications, and particularly good harvest weather led to a 210-million-ton grain crop. With its best crop in 8 years, the USSR cut its purchases from the United States last fall. As a result, U.S. grain exports to the Soviets in the first half of fiscal 1987 were 5.7 million tons lower than a year before.

However, following a dry autumn and a harsh winter, Soviet purchases of U.S. corn began in late February, and interest in U.S. wheat also grew. Offered a substantial EEP subsidy, the USSR bought 4 million tons of U.S. wheat for delivery this year. This purchase compares with 153,000 tons during 1986.

Global corn trade is expected to rise in 1987 and again in 1988, but remain below peak years. Much of the 7-million-ton gain foreseen for the United States represents increased market share.

While world sorghum trade continues low, reduced competition is expected to result in U.S. sales' rising 40 percent over 1986. Barley trade continues strong, with both world trade and U.S. barley exports forecast at records in 1987.

### *EEP Initiatives Boost Sales*

U.S. wheat and flour exports for 1987 are forecast at 31.3 million tons, and value is projected at \$3.3 billion. World wheat trade is forecast to rise in 1987 mainly because of increased import demand in China and the USSR. The increase in U.S. sales is largely due to the various programs of

the 1985 Food Security Act, mainly lower loan rates and export promotion programs such as the EEP.

The EEP allows U.S. wheat and products to compete in markets where competitors are undercutting U.S. exports with subsidies. Besides the USSR, U.S. wheat exports to Eastern Europe, China, and North Africa are expected to rise in 1987, largely because of the EEP. The EEP wheat sale to the USSR is the largest single initiative since the program began in 1985. Most of the increase in U.S. barley exports also comes from the EEP.

### *Value Down for Grain and Oilseed Sales*

Together, U.S. wheat and coarse grain exports are expected to rise more than 15 million tons, but with lower loan rates and increased use of the EEP, the average price has fallen. During the first half of 1987, the per ton value of U.S. grain exports fell 25 percent. Lower prices will offset increased wheat and coarse grain volume, cutting the value of these grain exports about \$300 million below 1986.

The value of oilseed and oilseed product exports is forecast at \$5.8 billion, 10 percent below 1986 and the lowest since 1976. The drop reflects both reduced prices and lower volume. In 1986 and early in 1987, reduced Southern Hemisphere soybean crops boosted U.S. export volume. However, Brazil's 1987 soybean production is expected to rebound to 17 million tons, well above last year's 14 million, so U.S. export volume for the year could be lower. Larger soybean meal exports only partly offset the lower U.S. soybean export forecast.

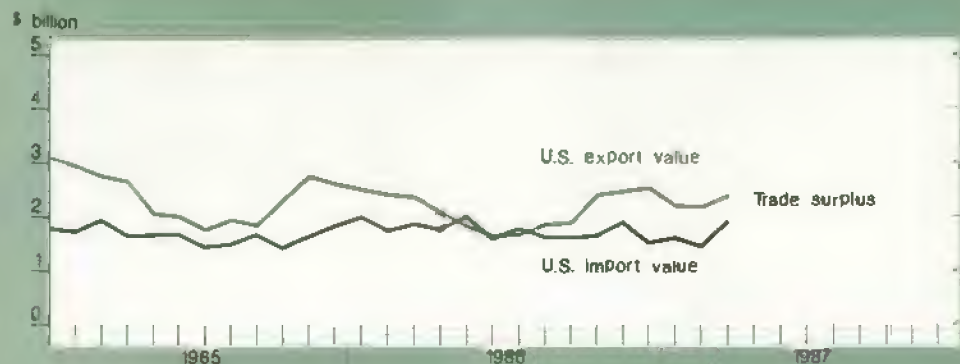
Unlike grains, cotton exports' higher volume will more than offset declining prices. Fiscal 1987 U.S. cotton exports are forecast to reach 1.5 million tons and \$1.8 billion, the volume nearly tripling from 1986's weak showing. Lower U.S. prices since August 1986 have led to rebounding sales in all major markets.

U.S. cotton exports are benefiting from reduced output in China and the Soviet Union. Forecasts of competitors' exports have risen in recent months, but remain below a year earlier. With a rising share of a growing world market, U.S. cotton exports are expected to be the highest since 1984.

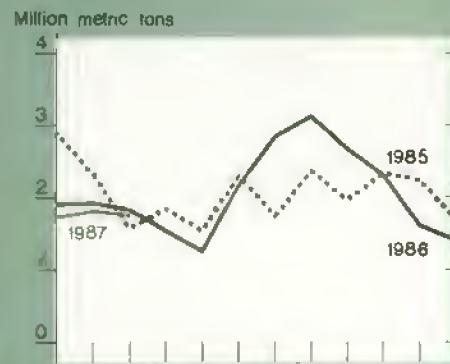


# U.S. Agricultural Trade Indicators

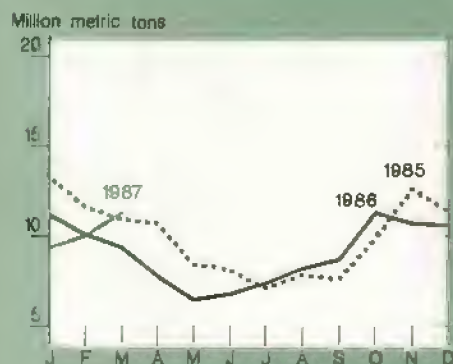
## U.S. agricultural trade balance



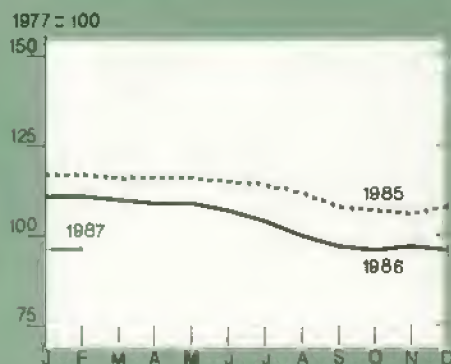
## U.S. wheat exports



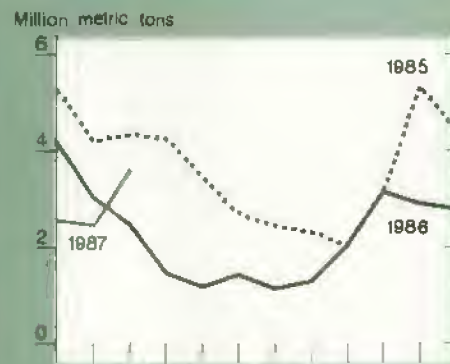
## Export volume



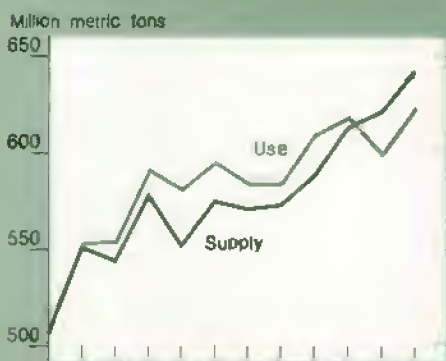
## Index of export prices



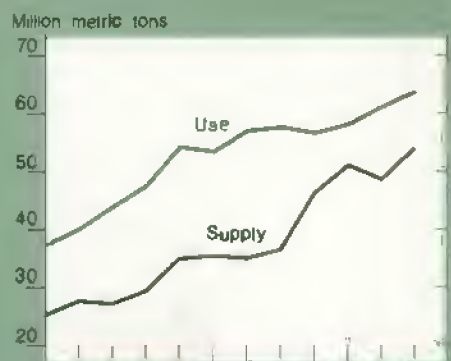
## U.S. corn exports



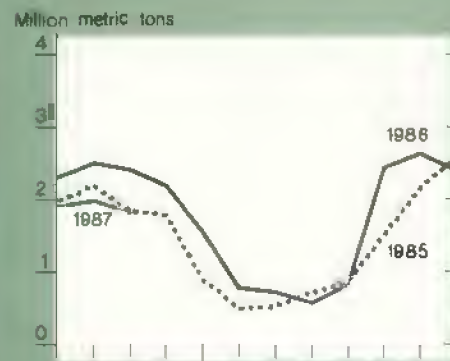
## Foreign supply & use of coarse grains



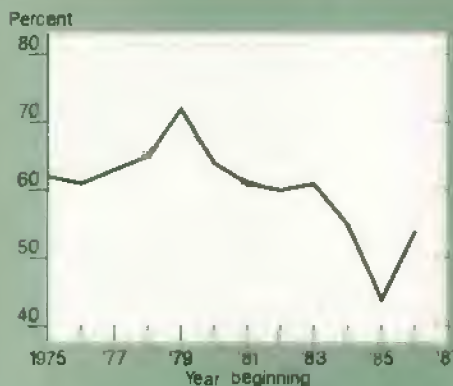
## Foreign supply & use of soybeans



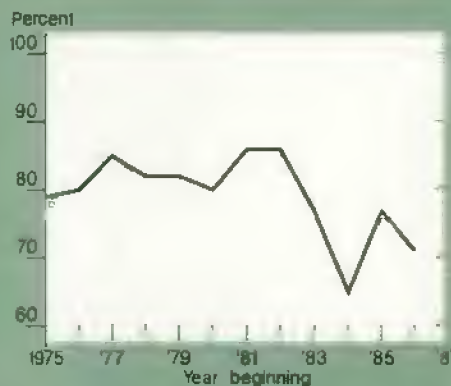
## U.S. soybean exports



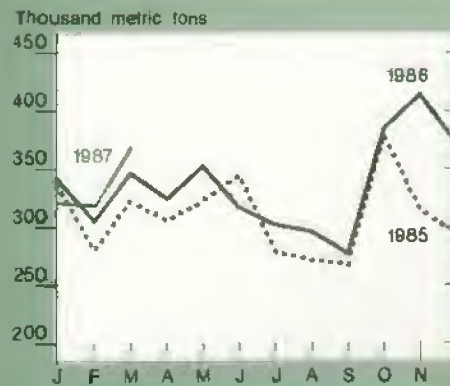
## U.S. share of world coarse grains exports<sup>1/2</sup>



## U.S. share of world soybean exports



## U.S. fruit & vegetable exports<sup>3</sup>



<sup>1/</sup> Excluding intra-EC trade <sup>2/</sup> October-September years <sup>3/</sup> includes fruit juices.

Note: Wheat, corn, soybean, and cotton exchange rates and export unit values are now included in the U.S. Agricultural Trade tables at the back of this issue

## **Non-Traditional Exports Boost Value Total**

The value of U.S. horticultural products is expected to rise, climbing 12 percent above 1986's \$2.7 billion. Volume is expected to be up 9 percent. The value of exports in all major categories should increase in 1987, as sales to Western Europe, Japan, and other Pacific Rim markets rise. Much of the gain is attributed to the lower value of the dollar against West European and Japanese currencies. Notable increases are expected in U.S. sales of fresh grapefruit, dried fruit, and wine.

Animal product exports are forecast at \$4.8 billion in 1987, \$400 million higher than the year before. The rise is due to increased beef exports to Japan and Brazil and poultry meat exports to Egypt, Iraq, and Japan. Beef exports to Brazil are the result of sales made to minimize the adverse effect of the Dairy Termination Program. EEP initiatives are expected to increase poultry sales to Egypt and Iraq.

High-value exports, such as animal and livestock products, became increasingly important to U.S. agricultural trade during the 1980's. Between 1981 and 1986, U.S. grain and oilseed exports fell from \$31 billion to \$16 billion. Over the same period, the remaining export commodities—largely high-value products—fell from \$12.5 billion to \$10.3 billion. In 1987, these exports are expected to increase to near their 1981 level, and their share of total U.S. agricultural export value is expected to exceed 40 percent.

## **High-Value Exports Rising To Developed Countries**

Increased high-value exports are expected to help sustain U.S. agricultural exports to developed countries in 1987, despite weaker economic growth there (table 31). U.S. sales to Western Europe will fall again, but the 1-percent drop compares favorably with the nearly \$1-billion average annual declines of the previous 6 years. Lower grain sales will offset increases in other commodities, as Spain's and Portugal's membership in the EC reduces their non-EC imports.

The value of U.S. exports to Japan and Canada is expected to rise in 1987 for the first time in 3 years, and high-value products will contribute heavily

to the turnaround. Japan's export-driven economy was hit hard by the rising yen and grew only 2.5 percent in the year ending in March, low by Japanese standards. Japan's purchases of bulk products advanced slowly during the first half of 1987, but the U.S. dollar value of meat and horticultural product purchases was driven upward by the rising yen.

In Canada, herd rebuilding reduced meat supplies and increased demand for U.S. animal products, while Canada's fruit, nut, vegetable, and tobacco crops were down from the previous year. The U.S. market share received a further boost when Canada banned imports from South Africa, which had been a growing U.S. competitor in horticultural products in recent years.

Exports to the less developed countries (LDC's) are also expected to rise in 1987, despite slowing economic growth. Lending terms continue to ease for major LDC borrowers, despite difficulty finalizing Mexico's September 1986 loan package and private lenders' insistence that the package terms do not constitute a precedent. Citibank's recent \$3-billion increase in provisions for third world credit losses has led other U.S. banks to make similar provisions. These moves may increase lenders' options in rescheduling negotiations.

A secondary market for developing-country debt is already emerging, supplementing debt-for-equity swaps and other instruments that have appeared as voluntary direct lending has contracted. The impact on agricultural imports of any positive developments in 1987 will be limited, and debt will still constrain U.S. sales to many countries. But, growing normalization of debtor-lender relations could have a favorable impact in the future. (See the special article on third world debt in this issue.)

## **U.S. Exports to LDC's Up \$1.1 Billion in 1987**

The fastest growing developing countries will be the most important growth market for U.S. exports in 1987. Strong export performance suggests robust economic growth in Hong Kong, Korea, and Taiwan, and points to increased demand for imported farm products. Led by higher sales of cotton, coarse grains, cattle hides, soybeans, and fruit, U.S. exports to these countries could rise 15 percent in fiscal 1987, to \$3.2 billion. Larger

livestock inventories there may mean record U.S. soybean sales and rebounding coarse grain exports, but cotton will account for the biggest portion of the \$400-million increase.

In Latin America, Mexico's improved financial position is expected to boost its growth, and U.S. agricultural exports to the region are projected to climb 8 percent to \$3.8 billion.

In the Middle East, prompt use of credit will help pull U.S. sales in 1987 to about \$1.6 billion, following a 14-percent decline to \$1.2 billion in 1986. Gains from exports of barley to Saudi Arabia and wheat to Turkey, through the EEP, will boost grain sales to a record. Increased high-value exports to Iraq should help offset the impact of lower prices for cereals, and counter the continuing problems in recapturing markets for horticultural products in the Arabian Peninsula.

## **Import Demand Weaker in Sub-Sahara, South Asia**

In Sub-Saharan Africa, falling grain imports will lead to a 24-percent drop in the value of U.S. agricultural exports. Increased local food production and import restrictions will limit U.S. exports to the region, particularly in South Africa and Nigeria.

The value of U.S. farm exports to Nigeria could fall more than 40 percent if that country's ban on wheat imports remains in place. Wheat exports to Nigeria were halted after December, as wheat joined a list of banned imports that already included corn and rice. Growing financial difficulties reduced Nigeria's purchases of U.S. farm products from \$538 million to \$158 million between 1982 and 1986.

Sales to South Asia are forecast to drop more than 20 percent to \$400 million in 1987, the fourth decline in as many years. A sharp drop in Pakistan's wheat import requirements, combined with lower prices and stiff competition for wheat and soybean oil sales, is expected to account for the decline. [Stephen MacDonald (202) 786-1621]



## PATTERNS OF PRODUCTION & USE FOR GRAIN IMPORTERS

Importers of coarse grains and wheat have slowed their purchases in recent years. The reasons vary by type of grain and by region, although since 1981/82 the tendency has been for domestic production to grow faster than domestic consumption for most importers.

For the United States, exports of coarse grain and wheat rose rapidly for most of the 1970's, peaking in 1979/80 for coarse grains and in 1981/82 for wheat. Exports then gradually declined until 1985/86, when they fell 34 percent below the preceding year. Exports for that season were the lowest since 1975/76 for coarse grain and since 1976/77 for wheat. But, exports are picking up again in 1986/87.

Coarse grain and wheat export levels partly reflect agricultural policy in the United States. Loan rates rose steadily from 1976 through 1983/84 (table 22). The rising loan rate acted as a floor for farm and export prices and was accompanied by rising world market prices. In 1983, loan rates were 77 percent above 1976 for corn and 62 percent above for wheat.

Rising U.S. loan rates lifted world prices and enabled export competitors to undersell the United States. This left the United States as the "residual supplier." Rising world prices also had an impact on the importing countries. On the demand side, prices to consumers increased and pressure was placed on importers' foreign exchange. On the supply side, world prices to producers rose and encouraged importers to expand production in the importing countries.

Coarse grain exporters considered here are the United States, Canada, Argentina, Australia, South Africa, and Thailand. Because the imports of the USSR are large and unpredictable, this discussion treats the USSR as one region, and all other importers as another. The EC-10 is included with the importers because it was a net importer until the 1984/85. During 1976-81, EC net imports averaged 10.3 million tons a year.

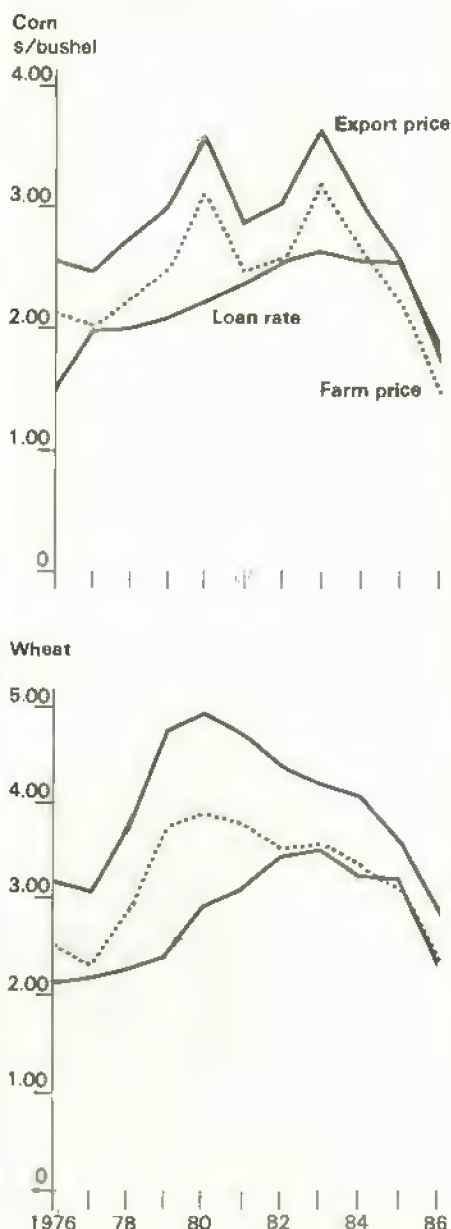
### Importing Countries, Coarse Grains

Coarse grain consumption expanded faster than production in the importing countries as a group from 1976 to

1981. The need for imports steadily grew during this period. For the importing countries excluding the EC-10, consumption of coarse grains increased at an average annual rate of 13 million tons during 1976-81, compared with an average annual output increase of 7.6 million.

From 1981 to 1986, growth in consumption of coarse grains in the importing countries as a group fluctuated around an average of 457 million tons. But, production continued to trend upward. Production for the group of countries increased at an average annual rate of 7 million tons, shrinking the need for imports.

Loan Rates Act as Floor Under Farm and Export Prices



The increase in coarse grain production in the importing countries was the result of higher yields. Harvested area has declined slightly in the last 4 years. Latin America, North Africa, and the Middle East had the fastest growth rates in coarse grain production. The EC-10 had record production in 1984/85. An unknown is whether the increased yields represented lower or higher cost per ton. Even if the cost per ton were climbing, rising world prices for coarse grains could have maintained profits.

### USSR, Coarse Grains

The details for the USSR are different, but the results are similar. Production of coarse grains in the USSR dropped from 115 million tons in 1976/77 to 69 million in 1981/82. Imports increased during this period and consumption declined.

Since 1981, USSR production has trended upward, with an average increase of 6 million tons per year. Consumption has also increased, but at an average of 4.5 million tons per year. Import needs tended to ease somewhat during 1981-85, although they remained above the 1976-78 average. Since wheat feeding is very large in the USSR, an unusually small wheat crop in 1984/85 led to record imports of both wheat and coarse grains.

### Importing Countries, Wheat

For wheat, the exporters discussed here are the United States, Argentina, Australia, Canada, and the EC-10. Again the USSR is treated as one importing region, and all other importers as another. Wheat consumption in the net importing countries gained through 1976-86 by 10 million tons per year.

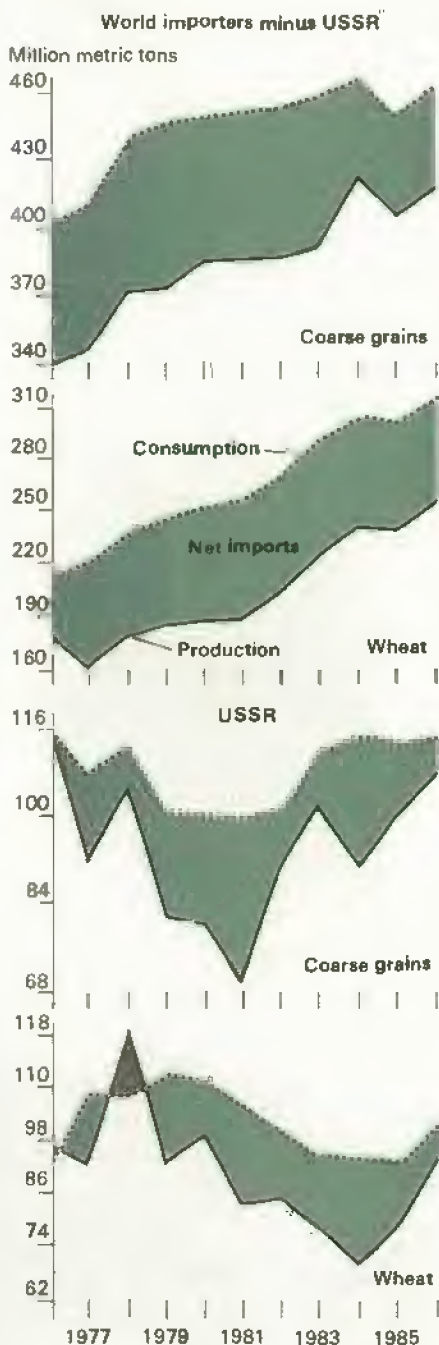
Wheat production in the group of importing countries grew slowly during 1976-81, and imports expanded. However, production increased by 13 million tons a year during 1981-86 and imports shrank. As with coarse grains, the major component of the production increase was a rise in yields. The yield per hectare increased an average of 2 percent per year during 1976-81 and over 4 percent per year during 1981-86.

## USSR, Wheat

Wheat production in the USSR trended down from the late 1970's through 1984, with the 1984 crop 43 percent below 1978. The prolonged and sharp decline in wheat production was alleviated through lower consumption and increased imports.

Soviet net wheat imports rose from 3.6 million tons in 1978/79 to 27.6 million in 1984/85. Harvest improved in 1985 and 1986, but was still below the 1978

### Imports Narrow for Wheat and Coarse Grains



record. Consumption picked up again in 1986/87 but continues well below 1977-81.

### Policy Change and Outlook

The Food Security Act of 1985 represented a major change in U.S. agricultural policy. Loan rates were reduced sharply and greater flexibility was provided to allow them to adjust to supply and demand. Moreover, with the use of generic certificates, market prices can average below the loan rate for extended periods.

It is hard to say exactly how the change in policy will alter the trends in grain exports for U.S. farmers because many issues are involved. Global trade in farm products is affected by the major trading partners' monetary, fiscal, and trade policies. Some factors pointing to a rise in U.S. exports include: lower U.S. market prices, the Export Enhancement Program, continued food assistance, prospects for capital transfers to less developed countries for economic development projects, and lower exchange rates.

In a number of importing countries, some factors could limit U.S. agricultural export expansion, including: continued foreign debt and a lack of foreign exchange, slow economic growth, political instability, and protective agricultural and border policies.

Countries which insulated producers from world price changes by internal food and agricultural policies will need to reevaluate these policies. Maintaining policies that were geared to expanding production in the past became extremely expensive in 1986.

A country's decision to change its expansionary production policies may depend on how permanent it views the change in U.S. agricultural policy. If countries believe the change will be short lived, and that world prices will soon be rising again, they may not change their protective policies. However, governments that believe the change in U.S. agricultural policy and world trade flows is not temporary may look more closely at alternatives. [Larry Van Meir (202) 786-1840]



## General Economy

### INFLATION OUTLOOK

Amid gyrating interest and exchange rates and sputtering industrial production, the general economy seems to be showing a little of the upward momentum expected by forecasters earlier in the year. Even though recent statistics indicate higher inflation and lower aggregate production than originally predicted, there have been some positive developments which have set off a strong undercurrent of growth for the coming months. Recent interest and exchange rate changes emphasize the riskiness of forecasting the outlook for growth. Still, the economy is likely to extend its 56-month expansion well into 1988.

### Inflation Heating Up

An alarming development in the first 4 months of the year was the resurgence of inflation and, along with it, a jump in interest rates. In contrast to the 1.1-percent increase in the overall CPI for 1986, the CPI through April 1987 rose at a 6-percent annual rate—a pace not seen since 1982 (table 6). To understand the resurgence and why it is unlikely to continue, the overall inflation rate can be broken into two parts: the underlying rate and the volatile-price rate.

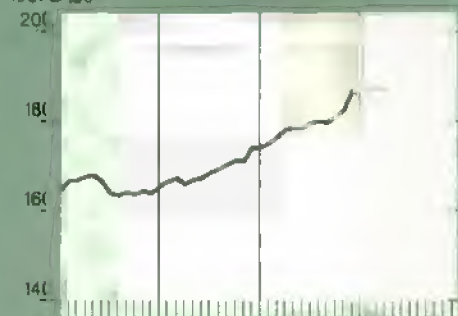
The underlying rate of inflation depends on sustained and fundamental movements in the general economy



# General Economic Indicators

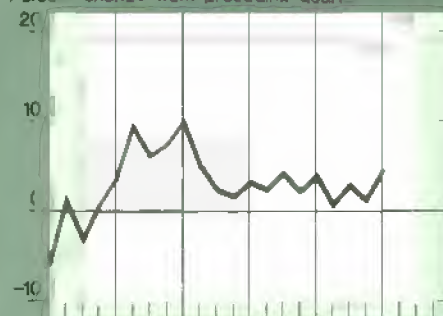
Composite leading economic indicators

1967 = 100



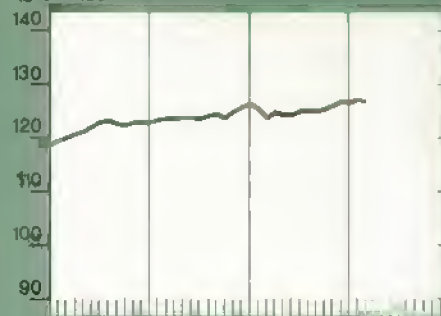
Gross national product<sup>1</sup>

Percent change from preceding quarter



Industrial production

1977 = 100



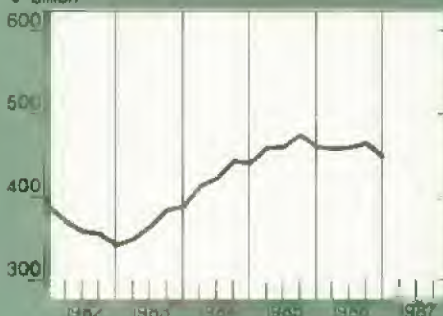
Disposable income and consumption expenditures<sup>2</sup>

\$ billion



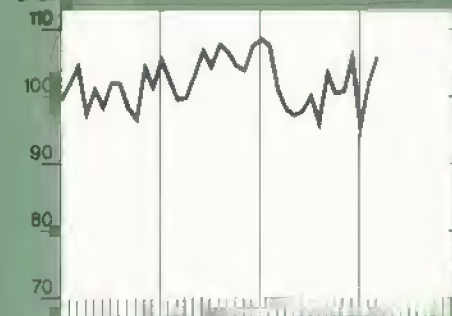
Nonresidential fixed investment<sup>2</sup>

\$ billion



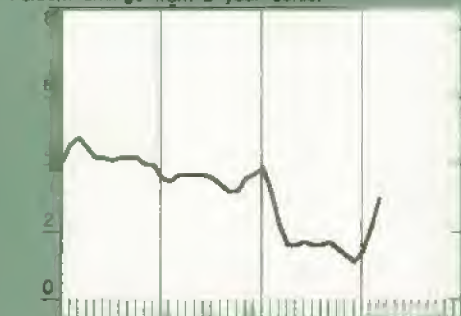
Manufacturers' durable goods orders<sup>3</sup>

\$ billion



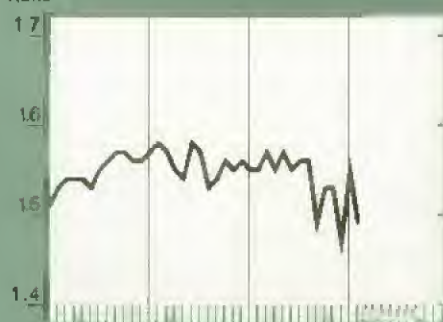
Consumer price index

Percent change from a year earlier



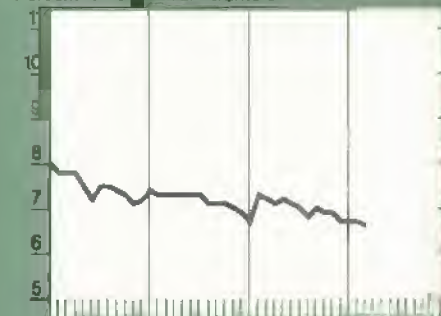
Inventory/sales<sup>4</sup>

Ratio



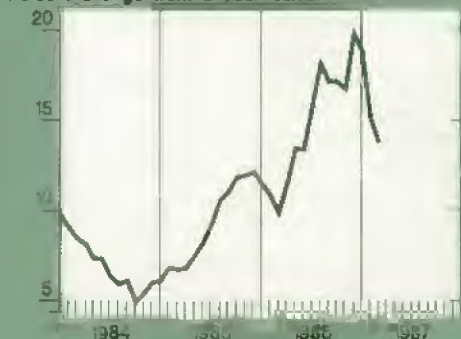
Unemployment rate<sup>5</sup>

Percent of all civilian workers



Money supply (M1)

Percent change from a year earlier



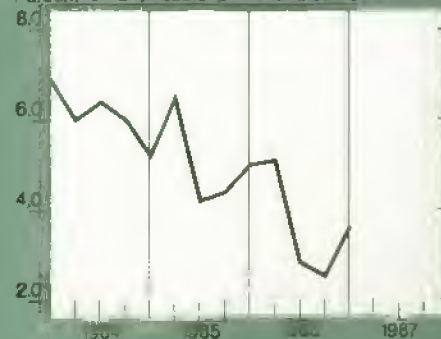
3-month Treasury bill rate

Percent



Savings rate<sup>6</sup>

Percent of disposable personal income



<sup>1</sup>Percent change from previous quarter in 1982 dollars. Seasonally adjusted annual rates. <sup>2</sup>Billions of 1982 dollars, seasonally adjusted at annual rates.

<sup>3</sup>Nominal dollars. <sup>4</sup>Manufacturing and trade, seasonally adjusted, based on 1982 dollar. <sup>5</sup>Seasonally adjusted.

<sup>6</sup>Calculated from disposition of personal income in 1982 dollars, seasonally adjusted at annual rates.

Sources: U.S. Dept of Commerce, U.S. Dept of Labor, and the Board of Governors of the Federal Reserve System

and tends to rise when the economy is near full capacity. When overall demand is straining capacity, bottlenecks and shortages develop and cause producers to bid up prices for goods in short supply. These higher prices subsequently get built into higher wages.

When labor is in short supply relative to demand, wages rise. Higher wages subsequently get built into higher prices. An overheated economy tends to produce a spiral of wage-price inflation.

Several factors suggest that rising overall demand and insufficient capacity are not the reason for inflation's recent resurgence. The current industrial operating rate is about 79 percent, compared with a mid-1984 high of over 82 percent. Further, while the unemployment rate has drifted down to about 6.3 percent, many analysts contend that the labor market is not very tight. Finally, per-unit labor costs fell in the first quarter.

One factor that has contributed to the underlying inflation, however, is the sustained drop in the dollar's value. The 42-percent decline in the value of the dollar since its last peak in February 1985 has put considerable upward pressure on import prices, although it took about a year for the major effect to be felt. Excluding fuel imports, overall import prices were nearly flat during 1985, but they rose 8.4 percent in 1986 and climbed at a 10-percent annual clip in first-quarter 1987. This import price factor is probably largely responsible for the increase in the underlying inflation rate.

The volatile-price part of inflation is comprised of prices that can swing widely and rapidly over short periods of time. The crude oil price is a good example. From May 1985 to May 1986, the price of North Sea Brent crude fell nearly 50 percent. From May 1986 to May 1987 it had rebounded by over 47 percent. Prices of many raw materials show this kind of volatility, but it is somewhat unusual for these prices to continue rising rapidly for a considerable period.

In 1986, the volatile-price part of inflation and the underlying rate moved in different directions. Measured by the Consumer Price Index excluding food and energy prices, the underlying rate of inflation was 3.8 percent. In contrast, the Producer Price Index for crude materials fell 8.5 percent. The overall CPI was held down to a 1.1-percent gain by the volatile-price inflation decline.

In contrast to 1986, the first 4 months of this year have seen increases in both parts of the overall inflation rate. The underlying rate accelerated from 3.8 in 1986 to 5 percent in the first 4 months of 1987. Likewise, the volatile-price part of inflation shot up in early 1987, growing at a 25-percent annual rate through April, reversing the experience of 1986.

#### *Rising Import Prices Pushing Inflation Rate*

The inflation story for the first part of 1987 is a rising underlying rate—probably due to the falling value of the dollar and rising prices for imported goods—and a higher volatile-price rate—mainly because of oil and food prices. The spurt in oil prices is likely to be over; prices have changed little in the last 3 months.

Because so much of the recent inflation seems to be coming from the volatile-price part, and because the price increases are unlikely to continue at that rate, there is a good chance that the run-up in inflation will prove temporary.

The overall inflation rate likely will be lower in the second half of the year than it was in the first. But it will certainly be higher than the overall rate for 1986, because the underlying rate has risen.

A jump in interest rates has come with the run-up in inflation in the first half of the year. Starting from the beginning of March, when 3-month Treasury bill rates were about 5.5 percent, rates moved to nearly 6 percent by mid-April, fell back to about 5.6 percent by mid-May, and have remained about the same since. Longer term rates moved consistently up, a sign that expectations of future inflation were driving them up. AAA-rated corporate bonds jumped nearly a full percentage point in April and May. Speculation that the Federal Reserve would tighten monetary policy to halt the dollar's slide also played a part in the interest rate increase.

It is likely that, with the worst of the 1987 inflation behind us and the dollar stabilizing somewhat, interest rates will stabilize too. While the change in the Federal Reserve leadership has heightened uncertainty about the future of monetary policy, fundamental factors suggest that major interest rate movements either up or down are unlikely.

Inflation and interest rate movements have a nearly immediate effect on farm expenses. From the macroeconomic viewpoint, higher inflation can put upward pressure on manufactured input prices in general, and the recent run-up in oil prices points to higher energy expenses in particular.

Likewise, short-term interest rates facing agricultural borrowers quickly reflect changes in economy-wide rates. For example, while the bank prime rate was falling from 9.5 to 7.5 percent in 1986, the average rate on feeder cattle loans fell from 12.3 to 10.9 percent.

The recent jump in interest rates points to pressure on farmers' interest expenses, despite the fact that the sector's total interest expenses are likely to fall in 1987 because debt is being liquidated. These upward pressures on prices paid by farmers are countered by reduced input demand, and hence moderation in input prices, because of acreage cuts for program crops.

#### *Demand for Farm Products May Climb*

The most noticeable developments in the general economy mainly affect the cost side of the agricultural income statement. But, other general economic developments indicate a moderate increase in demand for agricultural products. Real growth in GNP was a brisk 4.4 percent in the first quarter of 1987 and is likely to be above 2 percent for the second quarter—in line with projections of about 3-percent real growth for the year (table 2).

The long-awaited turnaround in export volume began in the fourth quarter of 1986 and seems to be continuing. The turnaround is resulting from the fall in the value of the dollar—the flip side of import price increases.

With export demand providing an economic stimulus, businesses are likely to accelerate their purchases of new plants and equipment throughout the year, further adding to real growth. According to a recent survey by the Bureau of Economic Analysis, businesses now plan to buy over 3 percent more new plants and equipment during 1987 than last year. Six months ago, the 1987 intentions were for only a 0.9-percent increase.



Rising exports and investment-goods purchases should help to pull the manufacturing sector out of the doldrums. Industrial production grew only 1.1 percent in 1986, and it has not grown at all this year. Rising demand for manufactured goods should increase manufacturing output, leading to increases in employment and personal income—which should support spending on consumer goods, including food.

Unlike 1985 and 1986, when consumer spending grew nearly a full percentage point faster than real GNP, 1987 likely will not see real consumer spending outpace real GNP. Instead, consumers will probably attempt to rebuild savings from their historically low percentage of disposable income and to pay off some of the debt incurred over the last 2 years. Consumer spending could grow a full percentage point slower than real GNP. That's still enough to provide support to the agricultural sector, but certainly not enough to create a demand-induced shortage of agricultural goods.

Perhaps more important than direct consumer spending on agricultural products is the fact that increasing exports and investment spending should help to create a more balanced and less vulnerable general economy—and a more stable environment for agriculture. [Ralph Monaco (202) 786-1283]

#### Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time August *Agricultural Outlook* comes off press.

#### July

- 1 Egg Products
- 2 Poultry Slaughter
- 2 Dairy Products
- 7 Celery
- 8 Noncitrus Fruits & Nuts-Midyear Supplement
- 9 Crop Production
- 13 Turkey Hatchery
- 14 Mink
- 16 Milk Production
- 17 Vegetables
- 20 Catfish
- 21 Farm Prod. Expenditures, 1986 Summary-Final
- 23 Eggs, Chickens, & Turkeys
- 24 Cold Storage; Cattle on Feed
- 24 Livestock Slaughter
- 28 Peanut Stocks & Processing
- 31 Agricultural Prices



## Transportation

### OUTLOOK FOR FRESH PRODUCE

Fresh produce shipments have been running 1 percent above last year's level of 9,800 cwt per week through April. All modes of transportation are expected to remain readily available to meet shippers' needs.

Trucks will remain in good supply for the rest of the year. More than 21,000 refrigerated trailers are forecast to enter the fleet this year, 9 percent more than in 1986 and only 10 percent below 1984's record.

More than 120,000 heavy truck tractors likely will enter the fleet—6 percent more than last year. In April, retail sales of truck tractors weighing

33,000 pounds or more were reported to be 14.4 percent above a year earlier. These powerful units are required to haul the larger loads now permitted on interstate highways.

New tractor-trailer combinations allowed include 48-foot trailers (up from 45 feet) and double or even triple trailers in some States. For produce shippers, these larger combinations offer capacity increases of 6-11 percent, depending on the commodity hauled and the configuration of the truck. Since operating costs for 48-foot vans are essentially the same as for 45, the new equipment offers real gains in efficiency. Also, the newer tractors tend to have more fuel-efficient engines.

### Truck Costs Up Fractionally

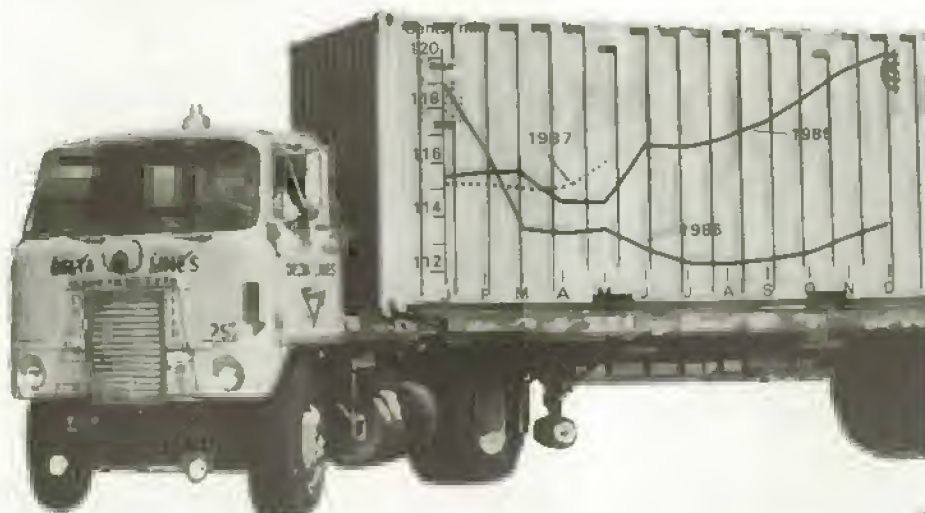
Costs of operating trucks this year have averaged 1 percent above 1986. This rise offsets some of the gains from increased capacity per truck. Costs declined in 1986 because of lower fuel expenses. Per mile costs are expected to remain around \$1.16 for the rest of the year, above 1986 but below 1985. In 1986, eight States hiked diesel fuel taxes, the increases running 2 to 7.5 cents per gallon.

Even so, average fuel costs fell 6 cents per gallon during the year. Insurance costs, which have climbed in the past, appear to have reached a plateau. However, slow price gains in other cost elements such as interest charges could return truck costs to 1985 levels.

### Truck Rate Stable

Truck rates for lettuce shipped from California to New York City are ex-

Truck Operating Costs This Year Above '86





# Produce Transport Shares

Year	Rail	TOFC	Truck
Percent			
1981	8.4	2.8	88.7
1982	8.0	4.1	87.9
1983	8.5	5.9	85.6
1984	6.9	6.2	86.8
1985	5.6	6.4	87.9
1986	5.6	6.4	87.9
1987F	5.6	6.0	88.4

F = forecast.

pected to peak seasonally in July at levels slightly higher than last year. In May, rates rose to \$3.88 per box, 10 percent above a year before. Rates for citrus and vegetables rose only 5 percent. Rates for apples, normally much more stable than those for more seasonally marketed produce items, rose only 3 percent above a year earlier. With operating costs above last year's level and increased demand, rates have commenced their seasonal increases somewhat early. The large number of trucks seeking hauls, however, should temper the rise.

With the advantage of both cost and speed, trucks tend to dominate the short-haul market for all produce. While truck shipments peak in the summer, much of this peak is caused by relatively short hauls. Even cities such as Chicago and New York City get most of their summer produce trucked in from nearby sources.

For transcontinental and similar long hauls, truck rates are ordinarily well above rail rates. Trucks, however, offer much faster service than rail and hold a slight time advantage over trailers on flat cars (TOFC's).

For perishable items such as lettuce and tomatoes, trucks are preferred. Nonetheless, conventional rail service is attractive for long-distance shipments of relatively hardy produce such as potatoes.

Neither rail nor TOFC's are likely to increase their market share this year. On January 1, 1981, railroads owned 47,000 mechanical refrigerator cars. By April 1987, less than 10,000 remained in the inventory. This suggests that railroads have recognized the limited demand for their service in the distribution of perishable commodities. The market share of TOFC's has been nearly stable since 1983. [T.Q. Hutchinson (202) 786-1840]



## Inputs

### FERTILIZER PRICE OUTLOOK

Farm fertilizer prices fell by 21 percent from May 1984 to October 1986. Declining demand reflects continuing declines in crop acreage. The subsequent financial losses realized by U.S. fertilizer producers have accelerated the rate of restructuring and consolidation taking place in the industry. The pace of plant closings and company mergers increased during the 1986/87 fertilizer year. Prices were prevented from falling further by fertilizer production cutbacks, decreased imports, and increased exports.

Fertilizer producers have improved plant efficiency and reduced overhead while mergers have lowered fixed costs. Substantial drops in energy prices also contributed to reduced costs, particularly for ammonia, which uses natural gas as a feedstock. Several facilities have closed indefinitely, and some companies have filed for Chapter 11 bankruptcy protection.

In the first three quarters of 1986/87 (July 1986-March 1987), production of anhydrous ammonia was reduced 10 percent and ammonium nitrate 15 percent. Urea and ammonium sulfate output was close to a year earlier.

Producer inventories were down for anhydrous ammonia, nitrogen solutions, urea, ammonium sulphate, and

diammonium phosphate (DAP). Although production and inventories of domestic potassium chloride producers were up, lower Canadian supplies more than offset larger U.S. supplies.

Domestic fertilizer supplies were reduced as fertilizer exports increased and imports declined. China returned to the market after dramatically reducing 1985/86 purchases because of excess imports in 1984/85 and an attempt to conserve foreign exchange. China's increased purchases accounted for about 50 percent of the gain in U.S. DAP exports in 1986/87.

In the first three quarters of 1986/87, phosphate exports increased by 34 percent from a year earlier, primarily because of a 1.4-million-ton increase in DAP exports and a 329,000-ton increase in wet-process phosphoric acid exports. Nitrogen exports grew 21 percent as a result of increased DAP exports and a 363,000-ton rise in exports of ammonium sulfate. Potash exports were up by 16 percent; exports of potassium chloride and potassium sulfate increased by 13 and 84 percent, respectively.

Following a producers' petition filed in July 1986, the International Trade Commission (ITC) instituted preliminary antidumping investigations concerning urea imports from East Germany, Romania, and the Soviet Union. In a preliminary determination released in September, the ITC ruled that the U.S. urea industry was materially injured by urea imports from these countries.

In December, the Department of Commerce tentatively determined that Eastern European producers were guilty of dumping urea in the U.S. market and required importers of urea from Eastern Europe to post a bond, thus raising import prices. Consequently, urea imports from Eastern Europe declined, since they were no longer competitive in the U.S. market. Compared with a year earlier, urea imports from East Germany, Romania, and the Soviet Union fell by nearly 45 percent during the first three quarters of 1986/87, with most of the decrease occurring since November.

Overall, total plant nutrient imports declined by 5 percent during the first three quarters of the fertilizer year. Nitrogen imports were down 4 percent and potash down 6. Although phosphate imports increased by 9 percent, they account for only about 1 percent of total plant nutrient imports.



# Changes in Farm and Wholesale Prices of Selected Fertilizer Products

	Product						Index of prices paid
	Anhydrous ammonia 1/	Urea 1/	Nitrogen solutions 1/ 2/	Ammonium nitrate 1/	DAP 3/	Potassium chloride 4/	
	Percent						
Apr. 1986- Oct. 1986							
Farm price	-22.7	-8.6	-13.9	-4.1	-8.5	-3.6	-7.2
Wholesale price	-37.1	-21.3	-39.3	-3.1	-9.8	-9.7	NA
Oct. 1986- Apr. 1987							
Farm price	+7.5	+1.3	-3.9	-4.3	+7.3	+7.5	+0.8
Wholesale price	+28.9	+21.6	+30.3	-13.8	+10.6	+7.7	NA
Apr. 1986- Apr. 1987							
Farm price	-16.9	-7.5	-17.2	-8.2	-1.8	+3.6	-6.4
Wholesale price	-18.9	-4.3	-20.9	-16.4	-0.3	-2.8	NA

1/ Wholesale prices are f.o.b. Corn Belt. 2/ Farm price is average of prices paid for 28-, 30-, and 32-percent nitrogen solutions. 3/ Wholesale prices are f.o.b. central Florida. 4/ Wholesale prices are f.o.b. Carlsbad, New Mexico. NA = not available.

Source: "Green Markets," April 27, 1987, and earlier issues for wholesale prices; Agricultural Prices, USDA, NASS, April 1987 and earlier issues for farm prices.

From April to October 1986, wholesale fertilizer prices fell more rapidly than farm gate (retail) prices, resulting in increased wholesale-retail price spreads. The supply reductions and export increases that took place during the latter part of 1986 and early 1987, however, set the stage for a turnaround in fertilizer prices. Consequently, wholesale prices climbed from October 1986 to April 1987. Except for ammonium nitrate, wholesale price increases ranged from almost 8 percent for potassium chloride to more than 30 percent for nitrogen solutions.

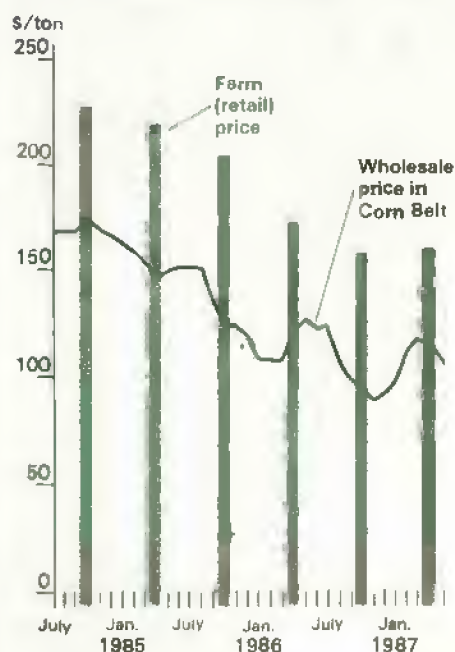
The price story was different at the farm level, however, as crop acreage continued to decline. Corn, which generally accounts for more than 40 percent of total plant nutrient use, declined from 76.7 million planted acres in 1986 to an estimated 67.6 million in 1987. Similarly, wheat area went from 72.0 million to an estimated 64.8 million acres, while soybeans dropped from 61.5 to 56.9 million acres.

In total, planted acreage of the 15 principal crops is estimated at 240.2 million acres in 1987, down from 264.2 million in 1986. In consequence, fertilizer use is projected to drop by about 6 percent from last year, to approximately 18.5 million plant nutrient tons.

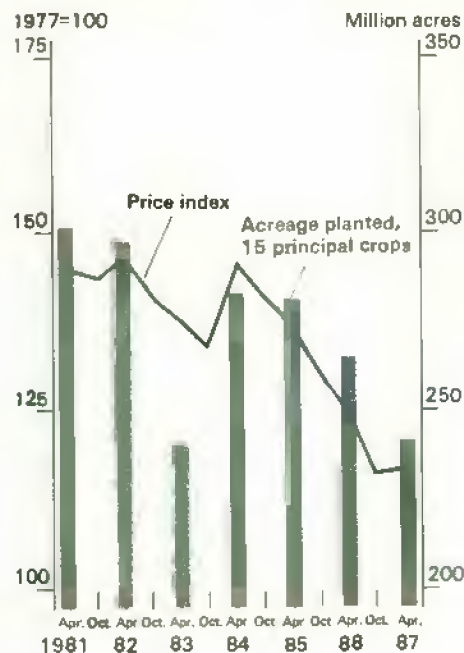
This decline in use puts pressure on retailers and distributors to hold the line on fertilizer prices at the farm level. Subsequently, wholesale-retail price spreads returned to more typical levels. Although wholesale prices of anhydrous ammonia in the Corn Belt advanced almost 29 percent from October to April, the average U.S. farm price of anhydrous ammonia climbed by less than 8 percent.

Over the same period, urea farm prices were up by less than 2 percent, while wholesale prices increased nearly 22 percent. Farm prices for DAP and potassium chloride, more closely mirroring wholesale increases, were up more than 7 percent. The farm price of nitrogen solutions declined, although wholesale prices rose by more than 30 percent. Finally, farm prices of ammonium nitrate were down at both the wholesale and farm level.

## Urea Prices Have Been Easing



## Fertilizer Prices Mirror Crop Acreage Declines





## Debt Still Overhangs Third World Economies

World debt has brought a crisis to international trade and economic development. Despite several years of debt rescheduling, the heavily indebted nations show no evidence of sustainable renewed economic growth. Of the 79 less developed countries (LDC's), seven had debt in 1982 that topped U.S.\$10 billion and have rescheduled over 50 percent of the debt in the last 4-1/2 years: Morocco, Nigeria, the Philippines, Argentina, Brazil, Chile, and Mexico. The fact that these most heavily indebted nations have also been among the fastest growing markets for U.S. agricultural exports makes the crisis especially serious for U.S. farmers.

Third world countries are increasing their production of food, but with rising populations and growing per capita consumption, food use is climbing faster than production. This would make prospects bright for exports of U.S. farm products if sustainable economic growth were helping these countries to meet debt payments. In spite of the improvement in the world economy from the recession of 1981-83, though, the problems related to overborrowing are likely to plague the world economy into the early 1990's.

### *Rapid Growth, Easy Money Set Scene for Debt Problems*

The current world debt problem had its roots in the rapid economic growth of the 1960's and early 1970's, when credit was readily available and inexpensive. Demands for natural resources, especially petroleum, expanded. The fourfold oil price hike by OPEC in 1973-74 shocked the world economy. Also, the balance of trade changed so that oil-rich countries had huge cash inflows.

The developed countries employed easy money policies both before and after the first oil shock. These monetary policies, combined with the increase in trade flows and trade liberalization, resulted in rapid growth in the world money supply.

International bankers directed some of the increased liquidity to a program of massive lending to middle-income LDC's. The bankers anticipated high returns, assuming that a country's guarantee was adequate provision against default. The bankers did not ask whether the funds were to be invested in long-range development projects or used for immediate consumption of previously unaffordable imports.

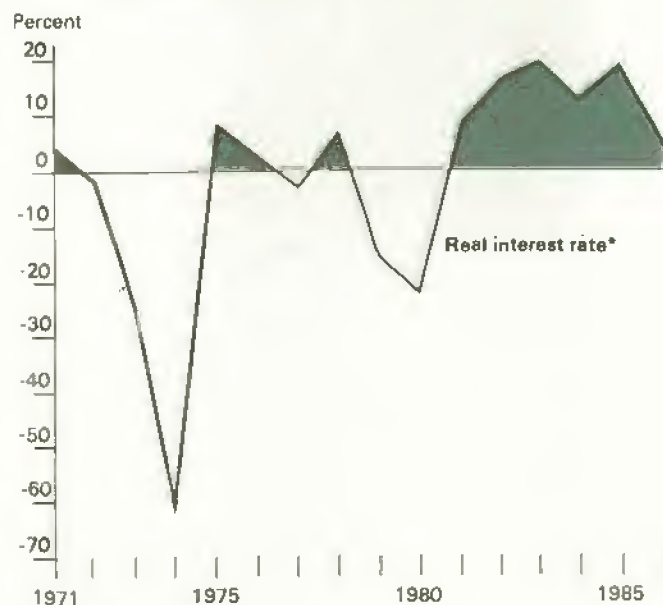
The 1973-74 oil price rise set the stage for the large debt accumulation; the second oil shock, in 1979-80, pushed the world into the recession of 1981-83. The inflationary effects of the first oil shock were fanned by easy money. When the second shock came, the reaction of most countries in the Organization for Economic Cooperation and Development (OECD) was to turn to tighter monetary policies. The second oil price increase was more disruptive than the first because many LDC's were by then heavily in debt and had to cope with the tighter monetary policies of the industrial nations.

The developed countries' tight money policies brought sharply slower economic growth among OECD nations and substantially higher real interest rates. The higher interest rates made debt an even heavier burden to the most heavily indebted LDC's. Further, the lower rate of income growth and the higher real interest rates in the industrial world reduced the demand for traded goods. This contributed to slower economic growth in developing countries.

### *Interest Rate Increase Raised Debt Burden*

Because they became extremely changeable, market interest rates grew in importance in the debtor nations' repayments. During the late 1970's, loans were extended at

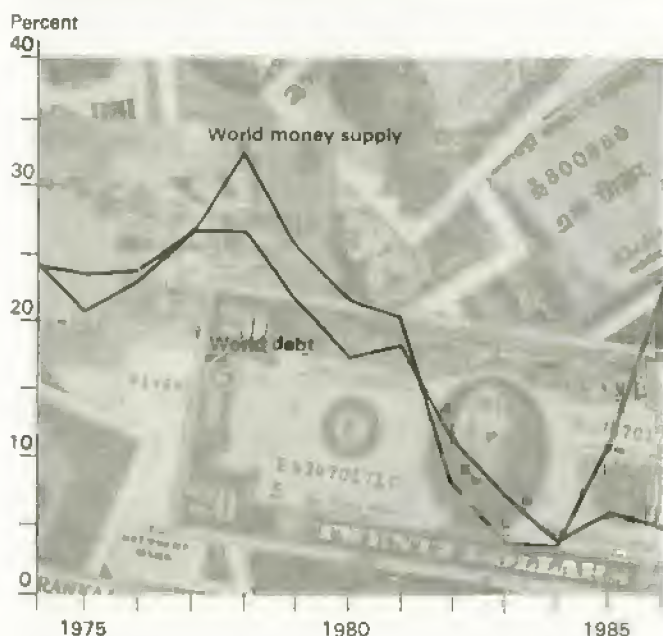
For Developing Countries, Real Interest Rate Has Been Positive for Most of 1980's



\*Equals the nominal rate minus the rate of change in export prices.



## Spurred by Trade Increase, World Money Supply Has Grown Faster Than Debt



variable interest rates, with premiums at fixed points above the U.S. prime rate or the London Interbank Offered Rate (LIBOR).

Real interest rates provide a measure of the opportunity cost of borrowing. The U.S. real interest rate is typically calculated by subtracting current inflation from the nominal interest rate. For a debtor country, though, the appropriate measure of the real rate is the nominal interest rate less the change in export prices. If a country's export prices rise faster than interest rates, the real interest rate is negative; exporters in the country are better off holding export commodities than money.

The 1970's were dominated by price increases that far exceeded nominal interest rates. Thus, borrowing was encouraged. The situation reversed itself in the 1980's. Nominal long- and short-term interest rates on dollar loans rose sharply beginning in 1978, as the demand for money increased and monetary policies tightened. Not until 1981, however, did inflation rates slow below interest rates, sharply increasing the real interest rate.

The interest rate reversal—from negative to positive—put the debtor nations in a bind. In the 1970's, low-interest loans could be paid later with inflated dollars. But loans made in the late 1970's and the 1980's at variable rates were no longer eased by inflation, and the real cost of repayments began to soar.

Despite the decline in short-term rates in 1983-85, real interest rates facing all developing countries remained above 10 percent those years, standing higher in 1985 than in 1984. However, in 1986 and early 1987, real interest rates declined below 4 percent.

Inflation accelerated tremendously in the developing world after 1981. High inflation was notable not only in the seven most indebted LDC's, but also through most of Latin

## How Economic Changes in Developed Countries Are Transmitted to LDC's

Although the major developed countries moved to a flexible exchange rate system in 1973, the developing countries for the most part have maintained fixed rates aligned with major currencies. The developing countries respond to changes in world monetary conditions and the growth of bank liabilities in the rest of the world.

An increase in money in the developed countries will, by depressing developed-nation interest rates, lead to capital inflows to LDC's, where returns remain higher. The developing countries' foreign exchange reserves will increase, and their money stock will rise as foreign currency is traded for their domestic currency. If this happens, it drives interest rates lower in the developing countries and can depreciate their currency.

However, many developing countries have chosen not to allow internal money supplies to be determined by external forces. "Sterilization" is a process by which a nation's central monetary authority (in the United States, the Federal Reserve) takes action to counter external influences on the domestic money supply, in order to maintain a fixed exchange rate. In this case, with pressure toward depreciation, sterilization tightens money and creates excess reserves, stabilizes prices, and returns interest rates to previous levels. Following such sterilization by an LDC, domestic real interest rates would continue higher than rates in developed countries.

Debt accumulation under these circumstances is rational: the LDC can borrow from developed countries at low rates, and repay with earnings that grow faster than the developed nations' interest rate. The rapid increase in world money during the 1970's resulted, not surprisingly, in rapid debt accumulation. The situation changed drastically, however, when the easy-money policies of the 1970's were abruptly transformed into the tighter international financial environment of the 1980's.

Oversterilization of reserve outflows resulted in more inflation. Real exchange rates depreciated against developed countries' currencies. Lower domestic returns supported yet higher real repayment schedules. Loans assumed at variable rates necessarily proved especially difficult for the LDC's to service as interest rates rose. LDC's with heavy debts were squeezed by less ability to import and by slower internal economic growth. The transmission mechanism described here shows that monetary policy changes in developed countries affect everyone.

America. Rapid inflation destabilizes countries that have a limited ability to borrow. Some of its more ravaging effects are the elimination of private savings, curtailment of long-term contracts, capital flight, and a collapse of domestic investment in new productive capacity. In countries with extremely high inflation rates, gross capital formation as a share of GDP plummets. The most heavily indebted LDC's all suffered from these effects.

### Prices for LDC's Commodities Fell

Prices received and paid by developing countries also changed. During the 1970's, general raw material shortages contributed to price increases for the LDC's exports,

many of which are raw materials. In the 1980's, by contrast, prices fell as stocks of primary raw commodities accumulated. The third world, much of which is dependent on a few commodities to earn precious foreign exchange, was selling less volume at lower prices. Price changes reflected the sharp differences between the exchange rates, interest rates, and monetary environment of the 1980's and the 1970's.

Between 1973 and 1980, export prices more than doubled. But after 1981, these prices fell 20 percent. Prices for many individual commodities have fallen by far greater percentages.<sup>1</sup> Not since the 1930's have developing countries faced such a depressed world commodity environment.

### ***The End of Easy Credit Forced LDC's To Reduce Imports***

The current account balance measures the balance of payments among countries—which countries owe which, and how much. It is closely related to the flow of credit. The availability of credit during the 1970's supported deeper current account deficits in LDC's than before. However, when lending nations began to curtail credit around 1981, the developing countries contracted their imports and tried to expand exports. The current account deficit for all developing countries reached \$153 billion in 1981, declining since then to \$60 billion. Deficits dropped the most in the most heavily indebted countries.

Although the Asian regions made significant gains, the world export pace slowed in the 1980's. U.S. agricultural exports stagnated. Since 1981, the LDCs' total imports have declined by nearly \$100 billion. The seven most heavily indebted LDCs' total exports have dropped 25 percent. Latin American total imports have also dropped 25 percent. In 1982, the Latin American countries were the largest importers of U.S. farm products, and the United States was also the chief market for their farm exports.

When the LDC's cut back on imports, they often curtailed nonagricultural purchases first. Agricultural imports increased as a share of all imports by developing countries after 1982. From 13 percent in 1982, the LDCs' farm imports rose to 15 percent of the total in 1984. It appears that the LDC's have been trying to maintain agricultural imports at the expense of investment imports. This policy is expedient but detrimental to important long-term development plans.

The most dramatic case of agricultural imports' substituting for other imports has been in Latin America. Farm products rose to 15.5 percent of all Latin America's imports in 1984, up from 11.5 percent in 1982. The 1984 share was higher than at any time during the 1970's.

The U.S. share of the world agricultural export market through 1984 remained above the late 1970's, except in 1982. For example, of all farm product imports by Latin

<sup>1</sup> The all primary commodity index (as calculated by the International Monetary Fund) has declined 25 percent since 1980. Raw food commodities (grains and fruits) have fallen 25 percent. The all metals index has dropped 30 percent, with copper down 35 percent and tin down 28. For Brazil, the dollar export price of sugar is down more than 60 percent. Only in early 1987 have these trends reversed.

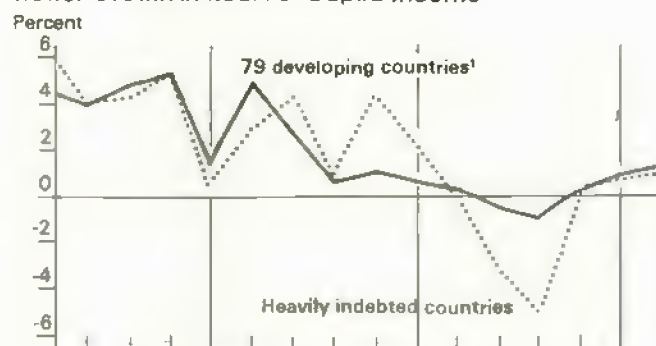
America, U.S. farm products in 1985 accounted for 50 percent, up from 35-45 percent in the late 1970's. The market share gains represented a bigger slice of a shrinking pie, however.

### ***Reschedulings Increased Significantly in 1981-83***

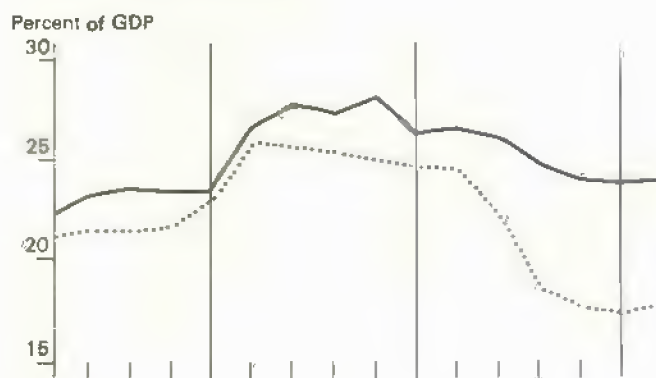
Through 1980, debt repayment problems did not pose a serious threat to either the world financial system or global trade. During 1956-75, only 11 countries were involved in

Compared With 79 Developing Countries,  
the Heavily Indebted Countries Have ...

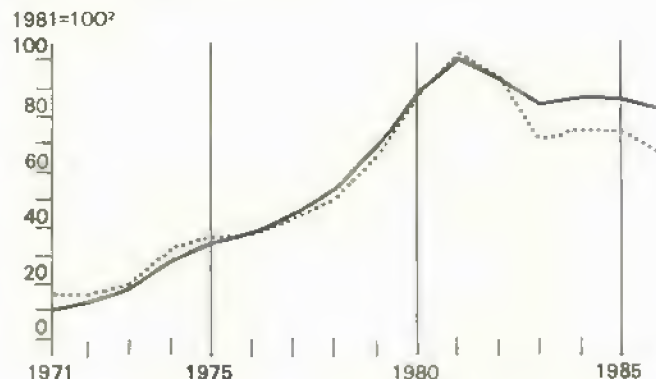
Slower Growth In Real Per Capita Income



Falling Capital Formation



Faster Declining Imports

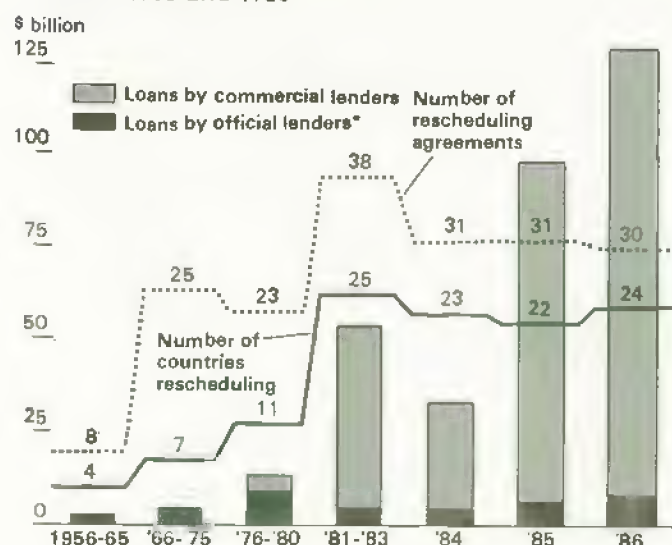


<sup>1</sup> Non-OPEC developing countries plus Venezuela and Indonesia.

<sup>2</sup> In 1981, imports of the 79 developing countries were U.S. \$611 billion and of the heavily indebted countries, U.S. \$180 billion.



## Commercial Debt Reschedulings Soared In 1985 and 1986



debt negotiation and reschedulings and the total debt rescheduled was only about \$8 billion. Between 1976 and 1980, again a total of 11 countries renegotiated their debt, which came to \$13.5 billion. The pattern of international debt reschedulings since then, though, indicates a serious mismatch between LDCs' payment commitments and their actual ability to service their debts.

Between 1981 and 1983, an unprecedented 25 countries rescheduled \$55 billion of debt. The magnitude of the debt at risk became a concern to the international financial system. In 1984, 23 countries renegotiated almost \$34 billion. The number of countries rescheduling in 1985 and 1986 (22 and 24, respectively) and the amounts (\$93 and \$122 billion) indicate that debt repayment is still very much an international problem.

### Net Outflows Began To Exceed Inflows in 1983

Between 1974 and 1982, net transfers<sup>2</sup> to developing countries totaled about \$200 billion; the largest single year was 1978 with \$57 billion. Data on the decline in debt growth show significant credit withdrawn from developing countries after 1982.

Starting in 1983 and continuing through 1986, net transfers to developing countries were negative—that is, debt-service payments were greater than incoming new credit. During 1983-86, there was a net outflow of about \$110 billion, with 1984 alone accounting for almost \$40 billion. Despite marginal improvements in 1985 and 1986, net outflows still averaged \$30 billion per year.

<sup>2</sup> Net transfers are defined as the change in total debt—reflecting repayments and additional loans—less interest payments.

## Why the World Money Supply Shrank During 1981-84

Several factors dominated the slowdown in the growth of the world money supply during 1981-84:

- Deregulation of the U.S. banking sector and higher interest rates removed one of the chief incentives for overseas deposits by U.S. investors and U.S.-owned international banks;
- Reduced exports and increased debt payments reduced the money supply in debtor countries;
- World recession cut world trade and lessened the demand for money; and,
- U.S. domestic demand for money increased beginning around 1981-82. The rise in money demand centered around increased Government bond issues, followed by the 3-year growth market in stocks, and was accompanied by a proliferation of interest-bearing demand deposits.

Many sectors in the United States were demanding more money. The increased U.S. demand for money reduced the supply of dollars formerly available to the world trading community, since U.S. dollars are the chief component of overseas bank assets.

The world money supply has expanded again since 1985, mostly to provide liquidity to support increases in world trade.

### Debt-Service Ratio Fell

One common measure of the burden of international debt is the debt-service ratio; that is, total payments as a percentage of goods and service exports. For the 79 LDC's as a group, this measure rose from 12 percent in 1974 to a high of 29 percent in 1982. However, throughout that period of easy credit for the LDC's, new borrowings exceeded debt-service payments. During 1983-86, interest payments due swelled, and net debt-service payments (payments less borrowing) fell to less than the interest payments due. The debt-service ratio declined between 1982 and 1986, most notably between 1982 and 1983. Even so, \$1 out of every \$4 that the developing countries earned through exports during 1983-86 went for debt service.

Although the debt-service ratio indicates the current debt burden, this measure depends critically on payment terms, amount of new borrowings, and reschedulings. Rescheduling debt lowers the current debt-service ratio, but transfers the burden to the future.

### Adjustment Led to Lower Income

The withdrawal of credit from developing countries in the early eighties required a substantial balance-of-payments

## Balance-of-Payments Deficit Hurts Investment, Economic Growth

An increasing balance-of-payments deficit often results in a cut in investment. The reason why the burden of adjustment tends to fall on investment can be seen from the following accounting framework. Let  $Y$ , national income, consist of  $C$ , consumption, plus  $I$ , investment, plus  $G$ , government expenditures, plus  $X$ , export earnings, less  $M$ , imports. Total expenditure is the sum of consumption;  $S$ , savings (households and business plus net foreign transfers); and  $T$ , taxes. Income equals expenditure, so it follows that:

$$C + I + G + X - M = C + S + T.$$

Canceling consumption from each side and rearranging the terms yields:

$$(G - T) + (X - M) = (S - I)$$

That is, the government deficit plus net exports equals the difference between savings and investment. If government spending, taxes, exports, and savings remain unchanged, then any decrease in imports ( $M$ ) must be matched by a decrease in investment ( $I$ ).

Many developing countries have little domestic savings and small tax bases. Government expenditures may well depend on export earnings. Some countries seek to maintain investments under these conditions by increasing savings. This can be done by reducing consumption. But for most LDC's, the main adjustment to an increased drain on the balance of payments is a cut in investment. This investment reduction implies slower future economic growth.

adjustment, usually by the LDCs' reducing their imports.<sup>3</sup> An indicator of the size of the adjustment can be computed as the export increase or import decrease required to meet higher interest payments on the debt. It is useful to express this change as a ratio to exports, or a net adjustment rate.<sup>4</sup>

In 1973 and 1974, the net adjustment rate for all developing countries was less than 3 percent. It rose to more than 20 percent in 1975, dropped to just over 15 percent during 1976-80, but rose to more than 35 percent in 1981. Between 1981 and 1984, it dropped to just over 10 percent. The pattern for the seven most heavily indebted countries showed more extreme fluctuations than the pattern for all developing countries.

<sup>3</sup> Overall short-term balance-of-payments equilibrium requires that if capital inflows (net transfers) to a nation fall, the country must cut its net imports.

<sup>4</sup> The net adjustment rate (NA) is  $NA = X - M - iD$ , where  $X$  = exports of goods and nonfactor services,  $M$  = imports of goods and nonfactor services,  $i$  = the current interest rate on the level of total debt,  $D$ . The net adjustment rate is then  $NA/X$ . All magnitudes are nominal.

With loss of credit, lower export earnings, and rising real repayment rates, the developing countries were forced to adjust. Imports were cut, income growth slowed sharply, and capital formation was cut. The rate of real per capita income growth for the developing countries has declined since 1974. The seven most heavily indebted countries have experienced actual losses in real income per capita since 1981.

## The Consequence: A Low-Level Growth Equilibrium

Renewed growth in the LDC's will depend in part on their ability to increase exports. For this, they must sell to the industrialized countries. Although income growth in the industrial nations is positive, the rate of increase is modest compared with the 1970's. Further, if substantial numbers of developing countries are reducing imports and concurrently trying to boost exports, increasing total export sales around the world becomes extremely difficult. This has been the case since 1982.

Although many developing countries have been cutting their purchases and paying on their debts, no evidence of renewed economic growth has yet appeared. The adjustments to the debt crisis may well have forced developing countries (and, possibly, the world economy) into a low-level growth equilibrium. This will prevent the rapid debt-ratio reduction which would lead in turn to new credit availability and growth in the developing countries.

The LDC's have been a primary growth market for U.S. agricultural exports. However, the debt crisis has constrained world trade in general, agricultural trade as part of total trade, and U.S. agricultural exports.

The ideal world scenario for resolving the debt crisis would include a period in which debt-affected countries undertook policy changes to realign their export-import balance, followed by a period of renewed world growth led by expansion of trade.

The needed export-import adjustment has taken place, but there is scant evidence that it is being followed by renewed growth in incomes and trade. Contracted imports and rigorous promotion of exports in much of the world have made export markets more competitive and constrained.

Rescheduling the LDC's debt has become commonplace, but it has only improved the term structure of the debt, not reduced the burden. The burden is equal to or greater than it was at the height of the debt crisis in 1982. For all of the adjustments and renegotiations, third world debt continues to limit world trade and development. [Matthew Shane and David Stallings (202) 786-1705]



# Statistical Indicators

## Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1986				1987				
	II	III	IV	Annual	I	II F	III F	IV F	Annual F
Prices received by farmers (1977=100)	121	124	122	123	122	120	122	--	121
Livestock & products	130	146	144	138	143	141	142	--	141
Crops	110	102	100	106	100	98	101	--	101
Prices paid by farmers, (1977=100)									
Prod. items	146	145	142	145	143	147	147	--	146
Commodities & services, int., taxes, & wages	161	161	158	159	159	162	162	--	161
Cash receipts (\$ bil) 1/	130	130	146	134	124	121	125	--	126-128
Livestock (\$ bil)	67	75	76	71	70	70	72	--	71-73
Crops (\$ bil)	64	55	70	63	54	51	53	--	54-56
Market basket (1967=100)									
Retail cost	284	292	294	289	292	292	294	--	298
Farm value	222	244	243	234	232	234	237	--	236
Spread	320	319	324	321	327	330	330	--	335
Farm value/retail cost (%)	29	31	30	30	29	29	30	--	30
Retail prices (1967=100)									
Food	317	322	324	320	330	332	333	--	330-333
At home	302	308	310	305	316	316	317	--	316-320
Away-from home	359	362	366	360	370	374	378	--	374-380
Agricultural exports (\$ bil) 2/	5.7	5.5	7.7	26.3	6.9	7.2	5.7	7.9	27.5
Agricultural imports (\$ bil) 2/	5.4	5.0	5.1	20.9	5.3	5.0	4.6	4.8	20.0
Production: *									
Red meat (mil lb)	10,021	9,720	9,752	39,051	9,485	9,272	9,531	9,675	37,963
Poultry (mil lb)	4,536	4,684	4,603	17,929	4,533	4,975	5,170	5,020	19,698
Eggs (mil doz)	1,421	1,413	1,457	5,715	1,442	1,455	1,430	1,480	5,807
Milk (bil lb)	38.4	35.6	33.9	144.1	34.9	37.3	35.4	34.0	141.6
Consumption, per capita:									
Red meat and poultry (lbs)	53.8	53.8	55.0	214.3	52.4	53.4	54.3	55.5	215.6
Corn beginning stocks (mil bu) 3/	6,587.1	4,990.0	4,039.5	4,039.5	10,304.1	8,246.8	--	--	5,115.3
Corn use (mil bu) 3/	1,589.4	956.5	1,989.0	6,496.0	2,057.6	--	--	--	--
Prices: 4/									
Choice steers--Omaha (\$/cwt)	54.52	58.91	60.36	57.75	60.46	68-69	63-67	60-66	62-66
Barrows and gilts--7 mths. (\$/cwt)	47.23	61.13	53.08	51.19	48.11	55-56	48-52	40-46	47-51
Broilers--12-city (cts/lb)	54.3	66.6	56.2	56.9	50.0	48-49	46-50	43-49	46-50
Eggs--NY Gr. A large (cts/doz)	63.4	72.8	74.0	71.1	64.8	57-58	60-64	64-70	61-65
Milk--all at plant (\$/cwt)	11.87	12.37	13.33	12.52	12.90	11.85-12.15	12.10-12.50	12.60-13.30	12.35-12.75
Wheat--Kansas city HRW (\$/bu)	3.22	2.50	2.65	2.93	2.80	--	--	--	--
Corn--Chicago (\$/bu)	2.51	1.72	1.62	2.35	1.56	--	--	--	--
Soybeans--Chicago (\$/bu)	5.32	4.90	4.86	5.11	4.87	--	--	--	--
Cotton--Avg. spot mkt (cts/lb)	63.8	42.0	48.0	60.0	55.0	--	--	--	--
	1979	1980	1981	1982	1983	1984	1985	1986 P	1987 F
Gross cash income (\$ bil)	135.1	143.3	146.0	150.6	150.2	154.8	156.2	151	146-148
Gross cash expenses (\$ bil)	101.7	109.1	113.2	113.8	113.0	115.6	112.1	102	96-98
Net cash income (\$ bil)	33.4	34.2	32.8	36.8	37.1	39.3	44.0	49	48-52
Net farm income (\$ bil)	27.4	16.1	26.9	22.7	13.0	22.7	30.5	33	33-37
Farm real estate values (1977=100) 5/	125	145	158	157	148	146	128	112	103

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated.  
 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 4/ Simple averages. 5/ As of February 1. F = forecast. P = preliminary. \* = commercial production.

# U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1986				1987
	1984	1985	1986	I	II	III	IV	I R
\$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,765.0	3,998.1	4,206.1	4,149.2	4,175.6	4,240.7	4,258.7	4,348.4
Personal consumption expenditures	2,428.2	2,600.5	2,762.5	2,697.9	2,732.0	2,799.8	2,820.4	2,850.7
Durable goods	331.2	359.3	388.1	360.8	373.9	414.5	403.1	384.6
Nondurable goods	870.1	905.1	932.7	929.7	928.4	932.8	940.1	961.7
Clothing & shoes	147.2	155.2	164.8	161.3	165.0	166.6	166.8	171.2
Food & beverages	449.9	469.3	492.8	484.6	490.3	494.0	502.1	509.4
Services	1,227.0	1,336.1	1,441.7	1,407.4	1,429.8	1,452.4	1,477.2	1,504.5
Gross private domestic investment	662.1	661.1	683.6	708.3	687.3	675.8	663.2	718.1
Fixed investment	598.0	650.0	677.0	664.4	672.8	680.3	690.3	678.1
Change in business inventories	64.1	11.1	6.7	43.8	14.5	-4.5	-27.1	40.0
Net exports of goods & services	-58.7	-78.9	-104.3	-93.7	-104.5	-108.9	-110.2	-111.9
Government purchases of goods & services	733.4	815.4	864.2	836.7	860.8	874.0	885.3	891.4
1982 \$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,489.9	3,585.2	3,674.9	3,655.9	3,661.4	3,686.4	3,696.1	3,735.9
Personal consumption expenditures	2,246.3	2,324.5	2,418.7	2,372.7	2,408.4	2,448.0	2,445.8	2,438.8
Durable goods	318.9	343.9	368.6	345.4	357.1	391.6	380.4	361.3
Nondurable goods	828.6	841.6	872.1	860.6	877.3	875.4	875.1	876.2
Clothing & shoes	142.7	146.0	155.6	152.4	157.1	157.7	155.3	157.8
Food & beverages	424.2	433.4	440.5	441.1	444.2	437.9	438.7	442.3
Services	1,098.7	1,139.0	1,178.0	1,166.6	1,174.0	1,181.0	1,190.2	1,201.3
Gross private domestic investment	652.0	647.7	657.2	684.0	664.7	651.3	629.0	678.9
Fixed investment	592.8	638.6	650.7	644.1	649.6	651.6	657.4	643.9
Change in business inventories	59.2	9.0	6.6	39.9	15.1	-0.3	-28.5	35.0
Net exports of goods & services	-83.6	-108.2	-147.8	-125.9	-153.9	-163.3	-148.0	-137.2
Government purchases of goods & services	675.2	721.2	746.8	725.2	742.2	750.4	769.3	755.2
GNP implicit price deflator								
% change	3.8	3.3	2.7	2.5	1.8	3.6	.7	4.2
Disposable personal income (\$bil)	2,670.6	2,828.0	2,971.6	2,935.1	2,978.5	2,979.9	2,993.0	3,053.1
Disposable per. income (1982 \$bil)	2,470.6	2,528.0	2,602.0	2,581.2	2,625.8	2,605.5	2,595.4	2,612.0
Per capita disposable per. income (\$)	11,265	11,817	12,304	12,193	12,348	12,324	12,348	12,572
Per capita dis. per. income (1982 \$)	10,421	10,563	10,773	10,723	10,886	10,776	10,708	10,755
U.S. population, total, incl. military abroad (mil)	237.1	239.3	241.5	240.8	241.3	241.9	242.5	243.0
Civilian population (mil)	234.9	237.0	239.4	238.5	239.1	239.6	240.2	240.8
	Annual			1986	1987			
	1984	1985	1986 P	Apr	Jan	Feb	Mar	Apr
Monthly date seasonally adjusted								
Industrial production (1977=100)	121.4	123.8	125.1	124.7	126.5	127.1	126.8	126.3
Leading economic indicators (1967=100)	165.3	168.6	179.2	178.1	185.6	186.3	187.7	186.6
Civilian employment (mil. persons)	105.0	107.2	109.8	109.0	111.0	111.4	111.4	111.8
Civilian unemployment rate (%)	7.5	7.2	7.0	7.1	6.7	6.7	6.6	6.3
Personal income (\$ bil annual rate)	3,110.2	3,314.5	3,485.7	3,486.8	3,553.5	3,599.7	3,605.6	3,616.3
Money stock-M2 (daily avg) (\$bil) 1/	2,373.7	2,566.5	2,799.8	2,623.8	2,822.0	2,821.9	2,826.1	2,839.3
Three-month Treasury bill rate (%)	9.58	7.48	5.98	6.06	5.45	5.59	5.56	5.76
Aaa corporate bond yield (Moody's) (%)	12.71	11.37	9.02	8.79	8.36	8.38	8.36	8.85
Housing starts (thou) 2/	1,750	1,742	1,806	1,945	1,816	1,838	1,749	1,699
Auto sales at retail, total (mil)	10.4	11.0	11.5	11.2	8.2	9.9	10.1	10.5
Business inventory/sales ratio	1.48	1.50	1.54	1.55	1.55	1.49	1.48	--
Sales of all retail stores (\$ bil)	107.5	115.0	121.2	118.4	118.6	124.2	125.2 p	125.4
Nondurable goods stores (\$ bil)	68.5	71.8	73.8	73.1	74.8	76.9	76.9 p	77.3
Food stores (\$ bil)	22.6	23.7	24.6	24.3	25.0	25.2	25.3 p	25.5
Eating & drinking places (\$ bil)	10.4	11.1	12.1	11.9	12.9	13.1	13.1 p	12.8
Apparel & accessory stores (\$ bil)	5.6	6.2	6.7	6.6	6.7	7.1	7.2 p	7.3

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. R = revised.

Information contact: James Malley (202) 786-1283.



Table 3.—Foreign Economic Growth, Inflation, &amp; Export Earnings

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986 P	1987F
Annual percent change										
Total foreign										
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	2.9	2.8	2.5
CPI	10.2	14.0	16.7	15.8	14.4	18.7	21.3	21.1	11.6	17.2
Export earnings	27.5	14.6	22.6	-2.2	-5.8	-2.6	5.4	1.6	10.1	11.3
Developed less U.S.										
Real GNP	4.8	3.1	2.3	1.3	1.1	1.9	3.5	3.1	2.3	2.3
CPI	8.4	9.4	10.9	9.6	8.1	6.1	5.1	4.7	2.7	2.8
Export earnings	23.9	14.9	17.0	-3.3	-4.2	-0.5	6.1	4.9	19.1	11.7
Centrally Planned										
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.9	3.9	3.5
Export earnings	18.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	1.8	7.6
Latin America										
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.2	3.7	3.2	1.0
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.3	179.2	89.9	150.1
Export earnings	28.1	12.8	30.1	4.8	-9.7	-0.1	7.7	-6.0	-13.9	3.5
Africa & Middle East										
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	0.2	0.3	0.7	0.1
CPI	8.7	16.4	22.1	19.7	12.0	19.0	5.9	5.3	8.2	8.1
Export earnings	49.6	43.2	38.5	-7.0	-18.9	-17.2	-8.1	-8.4	-25.7	13.0
Asia										
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.6	3.2	4.9	5.1
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.4	5.0	5.7
Export earnings	30.1	19.4	27.3	5.0	-0.6	3.5	13.3	-1.8	7.3	10.7

P = preliminary F = forecast. Information contact: Timothy Baxter (202) 786-1688.

## Farm Prices

Table 4.—Indexes of Prices Received &amp; Paid by Farmers, U.S. Average

	Annual			1986		1987				
	1984	1985	1986 P	May	Dec	Jan	Feb	Mar	Apr R	May P
	1977=100									
Prices received										
All farm products	142	128	123	123	121	121	122	123	125	129
All crops	138	120	106	115	99	99	99	102	102	108
Food grains	144	133	109	118	99	100	102	102	103	106
Feed grains & hay	145	122	98	117	80	79	78	80	84	93
Feed grains	148	122	96	116	77	76	74	77	79	86
Cotton	108	93	81	87	90	84	79	83	87	97
Tobacco	153	154	138	141	131	130	131	131	130	130
Oil-bearing crops	109	84	77	79	76	72	72	72	74	80
Fruit, all	200	183	169	163	170	160	175	170	166	172
Fresh market 1/	218	186	176	172	177	166	182	177	173	180
Commercial vegetables	135	128	130	144	120	149	141	158	141	129
Fresh Market	133	123	123	144	112	151	137	160	139	125
Potatoes & dry beans	157	125	114	111	125	126	126	132	143	164
Livestock & products	146	136	138	131	141	142	144	142	147	150
Meat animals	151	142	145	138	146	150	155	156	165	172
Dairy products	139	131	129	124	138	137	133	129	127	124
Poultry & eggs	135	119	129	117	124	118	115	111	112	107
Prices paid										
Commodities & services										
Interest, taxes, & wage rates	165	163	159	--	--	159	--	--	162	--
Production items	155	151	145	--	--	143	--	--	147	--
Feed	135	116	108	--	--	99	--	--	100	--
Feeder livestock	154	154	153	--	--	164	--	--	179	--
Seed	151	153	148	--	--	146	--	--	149	--
Fertilizer	143	135	124	--	--	116	--	--	117	--
Agricultural chemicals	128	128	127	--	--	126	--	--	123	--
Fuels & energy	201	201	162	--	--	158	--	--	164	--
Farm & motor supplies	147	146	144	--	--	146	--	--	145	--
Autos & trucks	182	183	198	--	--	196	--	--	210	--
Tractors & self-propelled machinery	181	178	174	--	--	172	--	--	174	--
Other machinery	180	183	184	--	--	181	--	--	186	--
Building & fencing	138	136	136	--	--	136	--	--	136	--
Farm services & cash rent	148	150	150	--	--	148	--	--	148	--
Interest payable per acre on farm real estate debt	257	238	213	--	--	207	--	--	207	--
Taxes payable per acre on farm real estate	132	133	134	--	--	136	--	--	136	--
Wage rates (seasonally adjusted)	151	154	160	--	--	159	--	--	159	--
Production items, interest, taxes, & wage rates	162	157	151	--	--	149	--	--	152	--
Ratio, Prices received to prices paid 2/	86	79	77	77	77	76	77	77	77	80
Prices received (1910-14=100)	650	586	561	562	551	552	558	560	573	591
Prices paid, etc. (Parity Index) (1910-14=100)	1,132	1,120	1,097	--	--	1,091	--	--	1,112	--
Parity ratio (1910-14=100) 2/	58	52	51	--	--	51	--	--	52	--

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent Prices Paid Index. Prices paid data will be published in January, April, July, and October. P = preliminary. R = revised.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual*			1986		1987				
	1984	1985	1986 P	May	Dec	Jan	Feb	Mar	Apr R	May P
<b>Crops</b>										
All wheat (\$/bu)	3.46	3.20	2.71	3.01	2.49	2.53	2.58	2.58	2.62	2.70
Rice, rough (\$/cwt)	8.32	7.85	5.04	4.52	3.76	3.61	3.80	3.68	3.64	3.54
Corn (\$/bu)	3.05	2.49	1.96	2.39	1.50	1.47	1.42	1.47	1.52	1.70
Sorghum (\$/cwt)	4.60	3.97	3.11	3.89	2.41	2.37	2.36	2.45	2.58	2.63
All hay, baled (\$/ton)	75.40	68.80	61.90	70.30	57.20	55.40	58.10	57.80	62.90	73.30
Soybeans (\$/bu)	7.02	5.42	5.00	5.25	4.67	4.69	4.69	4.73	4.90	5.33
Cotton, Upland (cts/lb)	65.6	56.1	54.7	58.5	54.7	51.0	47.7	50.0	52.6	58.9
Potatoes (\$/cwt)	5.69	3.92	4.94	4.39	4.73	4.82	4.91	5.28	5.91	6.93
Lettuce (\$/cwt)	11.00	10.90	11.20	17.90	11.00	14.80	9.05	15.30	9.22	8.71
Tomatoes (\$/cwt)	25.60	24.10	25.40	27.20	19.00	28.30	25.80	32.10	26.90	19.70
Onions (\$/cwt)	11.70	9.75	9.80	9.31	12.00	16.90	16.70	19.40	26.30	24.30
Dry edible beans (\$/cwt)	18.70	17.60	18.80	16.90	22.70	22.00	20.30	19.10	17.80	18.50
Apples for fresh use (cts/lb)	15.5	17.3	NA	20.7	17.8	17.8	19.5	19.6	19.4	21.4
Pears for fresh use (\$/ton)	300.00	349.00	396.00	587.00	390.00	376.00	407.00	403.00	355.00	338.00
Oranges, all uses (\$/box) 1/	5.95	7.41	4.18	4.19	4.59	4.24	4.75	4.79	4.94	5.26
Grapefruit, all uses (\$/box) 1/	2.68	4.01	4.21	5.20	4.54	4.50	4.55	4.76	5.21	4.41
<b>Livestock</b>										
Beef cattle (\$/cwt)	57.60	54.00	52.80	51.00	53.20	56.40	58.80	59.30	62.60	64.90
Calves (\$/cwt)	60.20	62.40	60.90	58.00	62.20	66.40	70.60	72.50	75.10	77.60
Hogs (\$/cwt)	47.60	43.90	50.10	45.80	50.60	47.20	48.20	47.40	50.80	54.30
Lambs (\$/cwt)	60.30	68.10	69.10	76.30	73.20	76.60	76.00	80.80	86.10	88.40
All milk, sold to plants (\$/cwt)	13.50	12.70	12.50	12.00	13.40	13.30	12.80	12.50	12.30	12.00
Milk, manuf. grade (\$/cwt)	12.49	11.72	11.60	11.10	12.30	12.00	11.60	11.30	11.20	11.10
Broilers (cts/lb)	33.2	30.2	34.7	32.2	30.6	31.1	30.1	29.1	29.6	30.0
Eggs (cts/doz) 2/	70.3	57.4	60.3	56.8	65.2	59.3	58.3	54.4	55.6	50.1
Turkeys (cts/lb)	46.6	47.2	44.2	40.8	41.5	34.9	35.3	37.6	36.5	35.0
Wool (cts/lb) 3/	78.5	63.3	66.0	73.7	62.0	57.0	58.6	71.0	86.8	111.0

1/ Equivalent on-tree returns. 2/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 3/ Average local market price, excluding incentive payments. \*Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. P = preliminary. R = revised. NA = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.

## Producer and Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1986					1987 1/			
	1986	Apr	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
		1967=100								
Consumer price index, all items	329.4	325.3	330.2	330.5	330.8	331.1	333.1	334.4	335.9	337.7
Consumer Price Index, less food	328.6	325.7	330.0	330.2	330.4	330.6	332.2	333.6	335.4	337.3
All food	319.7	316.1	323.2	323.7	324.6	325.2	328.9	330.1	330.0	331.0
Food away from home	360.1	357.0	363.3	364.0	365.8	367.1	368.6	369.6	370.9	371.5
Food at home	305.3	301.5	309.0	309.8	309.9	310.2	315.2	316.6	315.8	316.9
Meats 2/	273.9	262.3	283.6	283.8	285.4	286.3	289.6	285.3	286.4	286.9
Beef & veal	271.4	266.0	272.4	273.8	277.6	279.5	282.9	280.7	282.7	285.8
Pork	273.8	249.9	300.1	298.0	295.6	294.2	294.0	289.8	287.2	284.4
Poultry	232.7	215.7	249.5	247.8	245.2	241.8	238.4	237.0	234.1	231.1
Fish	443.2	437.0	447.2	451.6	449.7	457.6	478.0	479.9	487.4	488.7
Eggs	186.3	188.0	186.0	186.2	195.8	198.6	193.2	187.4	180.0	174.6
Dairy products 3/	258.4	256.8	258.5	260.0	261.2	262.2	263.3	264.7	263.7	263.2
Fats & oils 4/	287.8	288.5	285.6	284.6	285.4	286.0	293.2	290.3	294.6	291.8
Fresh fruit	369.3	367.9	384.1	375.1	360.6	355.8	389.1	406.7	403.9	417.8
Processed fruit 5/	163.3	163.8	161.9	162.0	162.0	163.1	165.7	166.3	167.5	168.4
Fresh vegetables	330.3	333.7	321.0	328.8	338.9	342.5	356.3	377.7	364.7	379.4
Potatoes	307.3	267.4	335.4	323.4	325.7	332.0	340.1	357.0	355.3	371.4
Processed vegetables 5/	147.4	147.5	146.9	146.2	146.5	147.4	150.2	148.5	152.1	150.6
Cereals & bakery products 5/	325.8	322.5	328.5	328.4	328.5	329.5	331.5	332.7	333.2	335.6
Sugar & sweets	411.1	411.4	413.7	413.4	412.4	411.8	415.8	415.8	417.2	417.4
Beverages, nonalcoholic	478.2	487.4	475.7	477.5	476.9	470.2	482.6	481.9	475.4	469.8
Apparel Commodities less footwear	188.8	188.4	194.0	194.6	194.4	191.7	187.7	189.0	196.1	199.8
Footwear	211.2	211.4	212.0	215.1	215.1	214.0	209.9	211.0	216.5	219.2
Tobacco & smoking products	351.0	346.5	356.8	357.2	357.3	357.6	364.9	368.3	369.6	370.4
Beverages, alcoholic	239.7	239.5	240.4	240.8	240.5	240.8	242.5	243.2	243.6	244.3

1/ Beginning January 1987 the CPIs are calculated using 1952-84 expenditure patterns and updated population weights. The old series were based on 1972-73 expenditure patterns. 2/ Beef, veal, lamb, pork, and Processed meat. 3/ Includes butter. 4/ Excludes butter. 5/ December 1977=100.

Information contact: Ralph Perlett (202) 786-1870.



Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1986			1987			
	1984	1985	1986 P	Apr	Nov	Dec R	Jan	Feb	Mar	Apr
	1967=100									
Finished goods 1/	291.1	293.7	289.6	287.2	290.7	290.4	291.7	292.3	292.3	295.0
Consumer foods	273.3	271.2	278.0	271.9	283.1	282.8	280.0	279.6	280.4	283.3
Fresh fruit	253.0	256.1	262.1	248.1	272.1	272.1	255.1	260.0	266.9	250.3
Fresh & dried vegetables	278.3	245.1	241.1	255.9	262.5	251.9	226.9	219.2	260.0	258.5
Dried fruit	386.6	363.5	377.4	371.1	386.1	385.0	383.6	384.8	384.9	384.9
Canned fruit & juice	312.4	323.1	315.1	314.5	314.6	320.9	322.1	321.6	324.7	321.4
Frozen fruit & juice	351.0	362.3	314.8	308.9	320.1	326.7	333.4	333.3	335.5	341.3
Fresh veg., excl. potatoes	219.1	205.9	204.0	239.2	214.1	206.1	174.9	167.1	213.2	209.8
Canned veg. and juices	252.6	246.9	245.1	243.3	246.2	247.2	246.4	247.8	256.8	256.4
Frozen vegetables	291.0	298.4	298.5	297.7	298.3	298.8	300.3	300.4	300.6	302.6
Potatoes	397.7	304.3	312.6	253.4	374.1	350.5	367.2	359.5	362.1	366.1
Eggs	210.8	171.0	177.9	169.5	197.4	194.0	176.9	175.6	160.3	161.0
Bakery products	299.1	313.7	321.3	320.3	322.4	321.0	322.2	320.7	322.0	321.8
Meats	236.8	227.9	235.2	215.0	244.3	244.0	238.2	237.0	234.4	250.6
Beef & veal	237.1	221.3	216.0	202.5	223.6	219.7	217.1	222.7	224.0	240.0
Pork	226.5	223.8	250.8	214.4	259.1	262.9	250.4	238.3	228.2	254.0
Processed poultry	206.0	197.3	207.8	188.9	216.1	204.9	194.6	189.5	187.4	188.8
Fish	476.0	484.2	530.4	527.5	536.1	559.3	604.7	632.9	610.8	581.7
Dairy products	251.7	249.4	248.8	246.0	253.4	254.1	253.9	252.8	252.6	252.5
Processed fruits & vegetables	294.3	286.3	287.9	285.6	289.7	292.5	293.9	294.4	298.5	298.7
Shortening & cooking oils	311.6	290.6	242.4	244.4	233.8	236.2	239.8	240.6	238.7	239.7
Consumer finished goods less foods	294.1	297.3	283.4	282.2	281.2	280.8	284.8	286.0	285.7	288.9
Beverages, alcoholic	209.8	213.0	217.8	218.0	218.0	218.0	217.5	218.4	218.6	220.5
Soft drinks	340.2	343.6	349.7	352.8	350.8	351.1	351.8	354.4	356.3	357.9
Apparel	201.3	204.1	206.5	206.5	207.4	207.4	207.5	207.4	208.6	208.9
Footwear	251.7	256.7	261.8	262.4	263.4	264.0	264.6	263.8	265.5	264.9
Tobacco products	398.4	428.1	460.4	451.4	469.3	469.2	487.1	487.5	487.5	487.5
Intermediate materials 2/	320.0	318.7	307.6	307.1	304.8	305.0	307.1	308.9	309.4	310.9
Materials for food manufacturing	271.1	258.8	250.9	244.8	253.2	253.2	251.0	250.6	250.0	255.3
Flour	185.2	183.0	173.4	179.5	164.8	165.0	164.6	168.8	169.1	171.1
Refined sugar 3/	173.5	165.6	166.4	165.1	168.5	169.4	169.2	169.1	169.2	171.3
Crude vegetable oils	262.2	219.6	135.8	142.2	124.1	122.4	127.1	128.9	131.3	129.1
Crude materials 4/	330.8	306.1	280.0	273.7	279.2	277.0	284.0	288.8	287.7	295.5
Foodstuffs & feedstuffs	259.5	235.0	230.6	220.3	236.8	233.5	227.1	229.2	229.1	239.4
Fruits & vegetables 5/	278.1	260.5	261.2	263.3	278.2	272.1	249.7	247.6	274.3	265.8
Grains	239.7	202.8	167.2	191.3	146.3	149.7	140.9	140.6	142.3	149.8
Livestock	251.8	229.9	236.1	213.9	249.1	246.4	238.3	245.3	245.9	267.1
Poultry, live	240.6	226.2	248.8	211.2	250.9	219.7	212.3	199.8	199.5	202.0
Fibers, plant & animal	228.4	197.8	179.3	210.6	154.0	176.7	192.3	188.9	182.4	199.6
Fluid milk	278.3	264.6	256.9	248.4	270.4	271.4	271.5	267.4	260.5	256.1
Oilseeds	253.3	202.7	196.2	197.9	208.9	196.4	202.1	201.5	199.8	206.7
Tobacco, leaf	274.6	274.1	243.0	250.2	230.8	230.8	229.1	230.8	230.8	229.1
Sugar, raw cane	312.0	291.3	292.2	289.5	299.0	294.5	299.7	304.8	305.9	307.1
All commodities	310.3	308.7	299.8	298.2	298.7	298.5	300.9	302.7	302.8	305.1
Industrial commodities	322.6	323.8	312.1	311.6	308.8	309.8	313.6	315.7	315.8	317.4
All foods 6/	269.2	264.6	268.4	262.0	273.2	273.0	270.0	269.7	270.3	273.3
Farm products &										
Processed foods & feeds	262.4	250.5	252.0	246.2	255.8	254.7	251.5	251.9	251.9	257.0
Farm products	255.8	230.5	224.7	218.6	230.1	227.4	220.2	221.2	222.7	231.3
Processed foods & feeds 6/	265.0	260.4	265.1	259.9	267.9	268.2	267.0	267.1	266.4	269.8
Cereal & bakery products	270.5	279.9	281.8	282.6	280.4	279.4	279.1	280.1	281.5	282.0
Sugar & confectionery	301.2	291.0	295.7	293.4	298.5	299.7	298.0	297.1	298.7	300.3
Beverages	273.1	276.6	294.3	287.8	292.6	292.4	288.4	289.5	289.5	291.2

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. (Dec. 1977=100). 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). (1977=100). R = revised. P = preliminary.

Information contact: Bureau of Labor Statistics (202) 523-1913.

# Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual				1986			1987			
	1983	1984	1985	1986	Apr	Nov	Dec	Jan	Feb	Mar	Apr
<b>Market basket 1/</b>											
Retail cost (1967=100)	268.7	279.3	282.6	288.7	283.4	293.9	294.8	298.3	299.1	298.9	298.8
Farm value (1967=100)	242.3	255.4	237.2	234.1	18.3	244.8	241.3	232.0	234.2	236.8	240.7
Farm-retail spread (1967=100)	284.3	283.3	309.3	320.8	321.6	322.8	328.5	337.3	337.2	335.5	334.6
Farm value/retail cost (%)	33.4	33.8	31.1	30.0	28.5	30.8	30.3	28.8	29.0	29.3	29.7
<b>Meat products</b>											
Retail cost (1967=100)	267.2	268.1	265.5	273.9	262.3	285.4	286.3	286.3	285.3	286.1	285.5
Farm value (1967=100)	235.8	241.5	221.8	229.1	203.8	240.6	240.0	223.8	231.2	232.4	245.2
Farm-retail spread (1967=100)	304.0	299.1	316.6	326.2	330.8	337.8	340.8	363.9	348.6	349.0	332.6
Farm value/retail cost (%)	47.6	48.6	45.1	45.1	41.9	45.5	45.2	41.9	43.7	43.8	46.3
<b>Dairy products</b>											
Retail cost (1967=100)	250.0	253.2	258.0	258.4	256.8	261.2	262.2	263.2	264.3	263.2	263.0
Farm value (1967=100)	262.1	258.8	248.2	241.5	234.5	251.9	254.4	252.0	252.3	245.5	244.5
Farm-retail spread (1967=100)	239.3	248.3	266.5	273.3	276.4	269.3	269.0	273.0	274.8	278.7	279.2
Farm value/retail cost (%)	49.0	47.8	45.0	43.7	42.7	45.1	45.4	44.8	44.6	43.6	43.5
<b>Poultry</b>											
Retail cost (1967=100)	197.8	218.5	216.4	232.7	215.7	245.2	241.9	238.3	237.0	234.1	230.7
Farm value (1967=100)	213.0	249.9	234.9	255.4	219.8	266.6	228.4	221.7	216.7	214.6	215.8
Farm-retail spread (1967=100)	182.4	188.1	198.4	210.9	211.7	224.5	255.0	254.4	256.6	253.0	245.2
Farm value/retail cost (%)	53.1	56.3	53.4	54.0	50.1	53.5	46.4	45.8	45.0	45.1	46.0
<b>Eggs</b>											
Retail cost (1967=100)	187.1	209.0	174.3	186.3	188.8	195.8	198.6	183.5	187.2	180.3	175.0
Farm value (1967=100)	206.1	230.3	178.9	182.7	181.0	214.3	208.8	184.4	179.2	164.9	166.7
Farm-retail spread (1967=100)	158.5	178.2	167.6	177.1	200.1	169.0	183.9	206.5	198.8	202.6	187.0
Farm value/retail cost (%)	65.1	65.1	60.7	61.1	56.6	64.7	62.1	56.3	56.6	54.0	56.3
<b>Cereal &amp; bakery products</b>											
Retail cost (1967=100)	292.5	305.3	317.0	325.8	322.5	328.5	329.5	331.2	332.3	332.9	335.0
Farm value (1967=100)	186.6	182.0	175.9	142.3	165.8	125.7	127.0	128.4	130.4	131.5	129.0
Farm-retail spread (1967=100)	374.0	328.7	346.2	363.7	354.9	370.5	371.4	373.2	374.1	374.6	377.6
Farm value/retail cost (%)	11.1	10.8	9.5	7.5	8.8	6.6	6.6	6.7	6.7	6.8	6.6
<b>Fresh fruits</b>											
Retail cost (1967=100)	303.6	345.3	383.8	390.1	379.8	381.6	379.8	412.2	427.1	429.2	442.1
Farm value (1967=100)	220.6	315.1	302.7	285.3	244.2	305.6	308.5	283.0	304.8	282.5	260.8
Farm-retail spread (1967=100)	340.8	358.9	419.8	437.1	440.7	415.7	411.3	470.2	482.0	495.1	523.5
Farm value/retail cost (%)	22.8	28.3	24.4	22.7	18.9	24.8	25.2	21.3	22.1	20.4	18.3
<b>Fresh vegetables</b>											
Retail cost (1967=100)	299.3	331.8	317.5	330.3	333.7	338.8	342.5	355.4	374.4	363.6	378.0
Farm value (1967=100)	267.4	298.7	256.7	247.8	241.7	299.4	240.8	310.9	266.9	298.8	301.5
Farm-retail spread (1967=100)	314.3	347.4	346.1	369.2	376.9	357.5	350.3	376.3	425.0	394.1	414.0
Farm value/retail cost (%)	28.6	28.8	25.9	24.0	23.2	28.2	27.0	28.0	22.8	26.3	25.5
<b>Processed fruits &amp; vegetables</b>											
Retail cost (1967=100)	288.8	306.1	314.1	309.1	309.7	306.9	308.8	314.4	313.0	317.8	317.0
Farm value (1967=100)	300.5	343.5	378.5	326.3	320.8	332.1	344.3	358.7	363.4	369.5	365.4
Farm-retail spread (1967=100)	286.2	297.8	288.9	305.3	307.2	301.3	300.9	304.6	301.8	306.5	306.3
Farm value/retail cost (%)	18.8	20.3	21.8	18.1	18.8	19.6	20.2	20.7	21.0	21.1	20.8
<b>Fats &amp; oils</b>											
Retail cost (1967=100)	263.1	288.0	294.4	287.8	288.5	285.4	286.0	293.4	289.8	293.8	291.4
Farm value (1967=100)	251.0	324.8	271.3	199.1	213.5	181.5	184.1	196.9	189.0	192.5	186.3
Farm-retail spread (1967=100)	267.8	273.8	303.3	321.9	317.4	325.3	325.2	328.8	328.7	332.8	331.8
Farm value/retail cost (%)	26.5	31.3	25.6	18.4	20.6	17.7	17.9	18.8	18.1	18.2	17.8

	Annual				1986			1987			
	1983	1984	1985	1986	Apr	Nov	Dec	Jan	Feb	Mar	Apr
<b>Beef, Choice</b>											
Retail price 2/ (cts/lb)	238.1	239.6	232.6	230.7	227.0	233.8	234.8	236.6	233.6	233.6	236.8
Net carcass value 3/ (cgs)	145.4	147.6	135.2	133.1	125.2	141.7	136.3	134.0	137.5	139.5	150.9
Net farm value 4/ (cgs)	136.2	140.0	126.8	124.4	116.2	134.1	128.3	125.7	131.7	133.4	143.7
Farm-retail spread (cgs)	101.9	99.6	105.8	106.3	110.8	99.7	106.5	110.9	101.9	100.2	93.1
Carcass-retail spread 5/ (cgs)	92.7	92.0	97.4	97.6	101.8	92.1	98.5	102.6	96.1	94.1	85.9
Farm-carcass spread 6/ (cgs)	9.2	7.6	8.4	8.7	8.0	7.6	8.0	8.3	5.8	6.1	7.2
Farm value/retail price (%)	57	58	55	54	51	57	55	53	56	57	61
<b>Pork</b>											
Retail price 2/ (cgs/lb)	168.8	162.0	162.0	178.4	162.2	192.5	191.3	188.1	185.6	181.3	178.8
Wholesale value 3/ (cgs)	108.8	110.1	101.1	110.9	91.7	118.4	113.5	105.4	103.8	102.2	108.4
Net farm value 4/ (cgs)	76.5	77.4	71.4	82.4	64.8	86.1	81.4	75.7	77.8	76.8	82.7
Farm-retail spread (cgs)	83.3	84.6	90.6	96.0	87.4	106.4	108.9	112.4	107.8	104.5	96.2
Wholesale-retail spread 5/ (cgs)	60.9	51.9	60.9	67.5	70.5	74.1	77.8	82.7	81.8	78.1	70.5
Farm-wholesale spread 6/ (cgs)	32.4	32.7	29.7	28.5	26.9	32.3	32.1	29.7	26.0	25.4	25.7
Farm value/retail price (%)	45	48	44	46	40	45	43	40	42	42	46

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 736, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gusterson (202) 786-1830.



Table 9.—Price Indexes of Food Marketing Costs

(See the June 1987 issue.)

Information contact: Denis Dunham (202) 786-1870

## Livestock and Products

Table 10.—U.S. Meat Supply &amp; Use

Item	Beg. stocks	Production 1/	Imports	Total supply	Exports	Shipments	Military consumption	Ending stocks	Civilian consumption		Primary market price 3/
									Total	Per capita 2/	
Million pounds 4/											
Beef:											
1984	325	23,598	1,823	25,746	320	47	112	358	24,800	78.5	65.34
1985	358	23,720	2,071	26,157	328	51	115	317	25,346	79.1	58.37
1986	317	24,371	2,129	26,817	521	52	110	311	26,823	79.8	57.75
1987 F	311	23,113	2,169	25,589	525	60	110	325	24,569	75.2	62-66
Pork:											
1984	301	14,812	954	16,067	164	147	86	274	15,396	61.8	48.86
1985	274	14,807	1,128	16,209	128	131	70	229	15,651	62.1	44.77
1986	229	14,063	1,122	15,414	86	132	73	197	14,927	58.6	51.19
1987 F	197	14,330	1,100	15,627	100	140	80	225	15,082	58.7	47-51
Veal:											
1984	9	495	24	528	6	1	4	14	603	1.8	60.24
1985	14	515	20	549	4	1	7	11	526	1.8	62.42
1986	11	524	27	562	5	1	6	7	543	1.9	60.89
1987 F	7	449	25	481	8	1	7	7	461	1.6	70-74
Lamb and mutton:											
1984	11	379	20	410	2	3	0	7	398	1.5	62.18
1985	7	358	36	401	1	2	0	13	385	1.4	68.61
1986	13	338	41	392	1	2	0	12	376	1.4	69.46
1987 F	12	316	43	371	2	1	0	8	360	1.3	78-82
Total red meat:											
1984	646	39,284	2,821	42,751	501	198	202	653	41,197	143.6	NA
1985	653	39,408	3,255	43,316	461	185	192	570	41,908	144.5	NA
1986	570	39,296	3,314	43,185	613	187	189	527	41,670	141.7	NA
1987 F	527	38,208	3,333	42,068	632	202	197	565	40,472	136.8	NA
Broilers:											
1984	21	13,016	0	13,038	407	145	34	20	12,432	52.9	65.6
1985	20	13,762	0	13,781	417	143	34	27	13,161	55.5	50.8
1986	27	14,316	0	14,342	566	149	35	24	13,568	56.7	56.9
1987 F	24	15,564	0	15,588	750	140	36	26	14,637	60.6	46-50
Mature chicken:											
1984	92	672	0	763	26	2	2	119	614	2.6	NA
1985	119	636	0	755	21	1	2	144	587	2.5	NA
1986	144	629	0	773	16	3	2	163	589	2.5	NA
1987 F	163	625	0	789	28	4	1	130	629	2.6	NA
Turkeys:											
1984	162	2,685	0	2,847	27	7	13	125	2,676	11.4	74.4
1985	125	2,942	0	3,067	27	7	13	150	2,870	12.1	75.5
1986	150	3,271	0	3,422	27	4	10	178	3,202	13.4	72.2
1987 F	178	3,825	0	4,003	25	4	16	180	3,778	15.6	59-63
Total poultry:											
1984	275	16,373	0	16,648	460	153	49	264	15,722	66.9	NA
1985	264	17,340	0	17,604	465	151	48	321	16,619	70.1	NA
1986	321	18,216	0	18,537	609	156	47	365	17,359	72.5	NA
1987 F	365	20,015	0	20,380	800	148	53	335	19,045	78.8	NA
Red meat & poultry:											
1984	921	55,657	2,821	59,399	961	351	251	917	56,919	210.5	NA
1985	917	56,748	3,255	60,920	926	336	241	891	59,526	214.6	NA
1986	891	57,512	3,319	61,722	1,222	343	236	892	59,029	214.3	NA
1987 F	892	58,223	3,333	62,488	1,432	350	250	900	59,516	215.6	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. 3/ Dollars per cut for red meat; cents per pound for poultry. Beef: choice steers, Omaha 900-1,100 lbs.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry.

NA = not available. F = forecast.

Information contact: Ron Gustafson, Leland Southard, or Allen Baker (202) 786-1830.

Table 11.—U.S. Egg Supply &amp; Use

	Beg. stocks	Pro-duction	Im-ports	Total supply	Ex-ports	Ship-ments	Milli-tery use	Hatch-ing use	Ending stocks	Civilian consumption		Wholesale price <sup>a</sup>		
										Total	Per capita			
													No	Cts/doz
1982	17.5	5,801.9	2.5	5,821.8	158.2	26.7	22.4	505.6	20.3	5,088.6	265.1	70.1		
1983	20.3	5,659.2	23.4	5,703.0	85.8	26.6	25.1	500.0	8.3	5,056.2	260.8	75.2		
1984	9.3	5,708.2	32.0	5,749.5	58.2	27.8	17.6	529.7	11.1	5,105.1	260.9	80.9		
1985	11.1	5,688.4	12.7	5,712.2	70.6	30.3	20.2	548.1	10.7	5,032.2	254.7	66.4		
1986	10.7	5,715.0	13.7	5,739.4	101.6	27.9	17.5	565.9	10.4	5,016.1	251.5	71.1		
1987 F	10.4	5,806.7	11.6	5,828.7	99.6	24.0	20.0	592.5	10.0	5,082.6	252.3	62-68		

<sup>a</sup> Cartoned Grade A large eggs in New York. F = forecast. Information contact: Mark Weiner (202) 786-1830.

Table 12.—U.S. Milk Supply & Use<sup>1</sup>

Calendar year	Pro- duc- tion	Farm use	Commercial		Im- ports	Total commer- cial supply	CCC net re- movals	Commercial		All milk price 2/ \$
			Farm market- ings	Beg. stocks				Ending stocks	Disap- pear- ance	
			Billion pounds							
1980	128.4	2.4	126.1	5.4	2.1	133.6	8.8	5.8	119.0	13.05
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986 P	144.1	2.3	141.8	4.6	2.7	149.1	10.6	4.2	134.3	12.48
1987 F	141.8	2.3	139.5	4.2	2.7	146.4	5.3	4.4	136.7	12.50

<sup>1</sup> Milkfat basis. Totals may not add because of rounding. <sup>2</sup> Delivered to plants and dealers; does not reflect deductions. P = preliminary. F = forecast. Information contact: Jim Miller (202) 786-1830.

Table 13.—Poultry &amp; Eggs

	Annual			1986			1987			
	1984	1985	1986	Apr	Nov	Dec	Jan	Feb	Mar	Apr
<b>Broilers</b>										
Federally inspected & slaughtered, certified (mil lb)	12,998.6	13,569.2	14,265.6	1,249.6	1,050.4	1,252.2	1,276.4	1,457.8	1,298.0	1,258.5
Wholesale price, 12-city, (cts/lb)	55.6	50.8	56.9	50.1	57.5	50.0	51.8	49.8	48.5	48.6
Price of grower feed (\$/ton)	233	187	NA	189	NA	NA	174	NA	NA	183
Broiler-feed price ratio 1/	2.8	3.1	NA	3.1	NA	NA	3.6	NA	NA	3.2
Stocks beginning of period (mil lb)	21.2	19.7	26.6	23.8	25.3	22.5	23.9	27.2	23.5	25.5
Broiler-type chicks hatched (mil) 2/	4,593.9	4,803.8	5,013.3	424.1	402.6	437.3	439.6	406.2	457.2	454.3
<b>Turkeys</b>										
Federally inspected slaughter, certified (mil lb)	2,574	2,800	3,133	205.2	307.1	248.2	215.4	211.8	241.0	249.4
Wholesale Price, New York, B-16 lb. young hens (cts/lb)	74.4	75.5	72.2	64.6	80.7	71.1	55.3	58.5	60.3	58.3
Price of turkey grower feed (\$/ton)	245	212	NA	215	NA	NA	210	NA	NA	209
Turkey-feed price ratio 1/	3.8	4.4	NA	3.5	NA	NA	3.3	NA	NA	3.5
Stocks beginning of period (mil lb)	161.8	125.3	150.2	150.5	543.2	248.0	178.2	188.3	211.4	228.7
Poults placed in U.S. (mil)	180.0	187.8	225.4	23.1	13.8	17.7	21.1	22.6	25.2	26.1
<b>Eggs</b>										
Farm production (mil)	68,498	68,261	68,579	5,652	5,729	5,862	5,921	5,354	6,033	5,790
Average number of layers (mil) 3/	278	277	278	230	233	235	237	236	236	233
Rate of lay (eggs per layer on farms) 3/	245	247	247	20.4	20.5	21.2	20.8	18.8	21.4	20.8
Cartoned price, New York, grade A large (cts/doz) 4/	80.8	66.4	71.1	65.7	77.2	75.5	67.1	65.2	62.0	62.4
Price of laying feed (\$/ton)	206	182	NA	177	NA	NA	164	NA	NA	167
Egg-feed price ratio 1/	6.8	6.3	NA	6.7	NA	NA	7.2	NA	NA	6.4
<b>Stocks, first of month</b>										
Shell (mil doz)	.39	.93	.72	.60	.60	.87	.66	.60	.75	.86
Frozen (mil doz)	8.9	10.2	10.0	8.1	10.6	9.9	9.8	10.9	10.2	11.0
Replacement chicks hatched (mil)	458	407	425	42.4	27.5	33.3	34.2	35.2	42.3	42.1

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks are currently reported for 12 states only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Monthly data only available for 20 states. 4/ Price of cartoned eggs to volume buyers for delivery to retailers. NA = not available.

Information contact: Mark Weiner (202) 786-1830.



Table 14.—Dairy

	Annual			1986			1987			
	1984	1985	1986	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	12.29	11.48	11.30	10.98	11.81	11.88	11.70	11.27	11.03	11.00
Wholesale prices										
Butter, Grade A Chl. (cwt/lb)	148.8	141.1	144.5	138.8	151.8	145.5	137.3	136.7	137.8	138.8
Am. cheese, big, assembly pt. (cwt/lb)	138.0	127.7	127.3	125.0	133.4	130.4	127.7	122.5	122.2	122.4
Nonfat dry milk, (cwt/lb) 2/	80.9	84.0	80.6	80.4	82.0	81.4	82.0	79.0	78.8	79.0
USDA net removals										
Total milk equiv. (mil lb) 3/	8,637.0	13,174.1	10,628.1	1,701.3	7.7	390.1	1,201.3	862.8	646.5	598.8
Butter (mil lb)	202.3	334.2	287.6	50.8	-1.6	8.6	45.1	31.1	16.9	13.6
Am. cheese (mil lb)	447.3	629.0	468.4	65.6	3.0	19.0	26.7	21.8	29.9	32.0
Nonfat dry milk (mil lb)	678.4	840.6	827.3	105.5	24.3	46.8	48.9	41.2	57.7	61.0
Milk										
Milk prod. 21 states (mil lb)	114,545	121,043	122,185	10,630	9,400	9,717	8,932	9,279	10,376	10,378
Milk per cow (lb)	12,691	13,160	13,445	1,153	1,056	1,085	1,123	1,052	1,180	1,182
Number of milk cows (thou)	9,026	8,198	9,088	9,217	8,900	8,873	8,848	8,818	8,792	8,780
U.S. milk production (mil lb)	135,450	143,147	144,080	6/12,588	6/11,057	6/11,430	6/11,683	6/10,933	6/12,261	6/12,275
Stock, beginning										
Total (mil lb)	22,646	16,704	13,695	15,260	15,089	13,994	12,867	12,939	13,071	13,319
Commercial (mil lb)	5,234	4,937	4,590	4,938	4,823	4,342	4,165	4,480	4,363	4,446
Government (mil lb)	17,412	11,767	9,105	10,322	10,266	9,652	8,702	8,459	8,708	8,873
Imports, total (mil lb) 3/	2,741	2,777	2,733	162	277	324	200	151	195	NA
Commercial disappearance										
milk equiv. (mil lb)	126,912	130,640	134,049	10,726	11,596	11,324	10,150	10,141	11,512	NA
Butter										
Production (mil lb)	1,103.3	1,247.8	1,202.4	122.7	80.3	101.3	109.2	87.8	107.6	104.2
Stocks, beginning (mil lb)	499.4	296.5	205.5	283.3	253.3	218.5	193.0	202.6	231.6	254.0
Commercial disappearance (mil lb)	902.7	918.2	922.9	70.1	91.4	94.4	59.0	72.1	91.5	NA
American cheese										
Production (mil lb)	2,648.5	2,855.2	2,788.2	264.8	194.1	217.7	219.5	211.2	238.7	246.0
Stocks, beginning (mil lb)	1,161.5	860.5	850.2	822.3	819.3	770.8	687.1	674.2	635.3	614.8
Commercial disappearance (mil lb)	2,253.6	2,279.1	2,382.8	187.7	215.5	211.7	177.8	189.4	200.4	NA
Other cheese										
Production (mil lb)	2,025.5	2,225.7	2,411.0	194.6	206.8	221.7	194.0	189.7	217.2	212.4
Stocks, beginning (mil lb)	104.9	101.4	94.1	81.1	93.8	91.5	92.0	83.5	88.1	89.4
Commercial disappearance (mil lb)	2,310.9	2,515.7	2,684.9	206.5	240.8	254.4	206.1	209.9	237.1	NA
Nonfat dry milk										
Production (mil lb)	1,160.7	1,390.0	1,284.1	139.1	66.7	89.4	82.1	80.3	87.8	101.4
Stocks, beginning (mil lb)	1,405.2	1,247.6	1,011.1	988.0	793.4	742.6	686.8	596.6	559.7	512.8
Commercial disappearance (mil lb)	497.8	435.0	479.1	28.8	38.7	28.8	34.8	28.4	36.2	NA
Frozen dessert										
Production (mil gal) 4/	1,241.8	1,251.0	1,248.6	109.6	78.8	80.1	79.8	90.0	107.5	113.0

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States Production area, high heat spray process. 3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated P = Preliminary. NA = not available. Information contact: Jim Miller (202) 786-1830.

Table 15.—Wool

	Annual			1986			1987			
	1984	1985	1986	Apr	Nov	Dec	Jan	Feb	Mar	Apr
U.S. wool price, Boston 1/ (cwt/lb)	229	192	191	188	190	190	183	202	216	260
Imported wool price, Boston 2/ (cwt/lb)	241	187	201	210	199	208	211	212	234	248
U.S. mill consumption, scoured										
Apparel wool (thou lb)	128,982	106,051	126,768	12,663	9,321	10,108	10,426	11,516	14,118	11,275
Carpet wool (thou lb)	13,088	10,562	8,960	896	737	534	708	811	1,308	1,209

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20.60-22.04 microns) staples 2-3/4" and up. 2/ Wool price delivered at U.S. mills, clean basis. Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals

	Annual			1986			1987				
	1984	1985	1986	Apr	Nov	Dec	Jan	Feb	Mar	Apr	
Cattle on feed (7-States)											
Number on feed (thou head) 1/	8,006	8,635	7,920	7,293	7,546	7,826	7,633	7,294	7,143	7,222	
Placed on feed (thou head)	20,772	19,346	20,005	1,565	1,814	1,405	1,591	1,427	1,754	1,726	
Marketings (thou head)	18,785	18,989	19,243	1,631	1,447	1,494	1,803	1,473	1,586	1,581	
Other disappearance (thou head)	1,376	1,132	1,049	120	87	104	127	105	89	134	
Beef steer-corn price ratio.											
Omaha 2/	21.6	23.3	31.0	22.8	40.3	38.9	40.5	44.0	41.6	42.4	
Hog-corn price ratio, Omaha 2/	16.1	17.8	27.8	17.2	34.7	33.4	32.7	35.1	32.6	32.7	
Market prices (\$ per cwt)											
Slaughter cattle:											
Choice steers, Omaha	65.34	58.37	57.75	53.68	61.54	59.82	58.78	61.02	61.58	65.90	
Utility cows, Omaha	38.81	38.32	37.19	35.95	35.88	35.48	39.79	42.29	45.01	44.23	
Choice vealers, S. St. Paul	63.95	58.28	59.92	55.00	67.50	67.50	65.84	68.28	70.00	73.75	
Feeder cattle:											
Choice, Kansas City, 600-700 lb.	65.28	64.56	62.79	60.32	64.13	65.00	69.00	71.38	71.13	72.88	
Slaughter hogs:											
Barrows & gilts, 7-markets	48.86	44.77	51.19	40.27	53.62	51.42	47.39	48.73	48.22	51.10	
Feeder pigs:											
S. Mo. 40-50 lb. (per head)	39.12	37.20	45.62	37.98	50.00	47.69	47.00	53.96	54.98	56.05	
Slaughter sheep & lambs:											
Lambs, Choice, San Angelo	62.18	68.61	69.46	67.57	65.42	73.33	78.56	75.75	79.38	93.33	
Ewes, Good, San Angelo	20.90	34.02	34.78	32.20	37.58	38.00	39.81	41.25	34.88	40.06	
Feeder lambs:											
Choice, San Angelo	61.02	85.91	73.14	67.50	83.50	89.92	95.88	99.50	108.50	108.25	
Wholesale meat prices, Midwest											
Choice steer beef, 600-700 lb.	98.01	90.76	88.88	83.34	95.70	82.04	89.70	91.69	92.86	100.63	
Canner & Cutter cow beef	74.70	74.13	71.31	69.76	68.92	69.58	77.92	80.88	84.58	83.07	
Pork loins, 8-14 lb. 3/	96.36	91.51	104.78	89.31	100.13	102.30	88.29	99.40	83.25	88.95	
Pork bellies, 12-14 lb.	60.08	59.50	65.82	49.45	63.30	64.72	66.32	57.81	60.02	63.41	
Hams, skinned, 14-17 lb.	78.22	67.50	80.01	58.20	109.40	87.43	65.75	65.43	71.97	75.78	
Commercial slaughter (thou head)*											
Cattle	37,582	36,293	37,292	3,214	2,819	3,076	3,189	2,662	2,904	2,871	
Steers	17,474	16,812	17,519	1,542	1,290	1,399	1,531	1,284	1,413	1,523	
Heifers	10,691	11,237	11,098	926	793	875	1,006	825	892	855	
Cows	8,617	7,387	7,960	692	680	746	608	502	541	534	
Bulls & stags	789	758	715	54	57	55	54	52	58	59	
Calves	3,297	3,385	3,407	303	256	289	263	239	266	303	
Sheep & lambs	6,759	6,165	5,632	493	413	454	428	400	442	496	
Hogs	85,168	84,492	79,504	7,352	6,255	6,796	6,817	6,055	6,966	6,665	
Commercial production (mil lb)											
Beef	23,418	23,557	24,215	2,110	1,808	1,971	2,102	1,747	1,907	1,928	
Veal	479	499	510	45	37	41	39	36	38	34	
Lamb & mutton	371	352	330	29	24	27	25	24	27	29	
Pork	14,720	14,728	13,983	1,282	1,115	1,220	1,244	1,070	1,226	1,169	
	Annual			1985			1986			1987	
	1984	1985	1986	IV	I	II	III	IV	I	II	
Cattle on feed (13-States)											
Number on feed (thou head) 1/	9,908	10,653	9,754	7,937	9,754	8,945	7,970	8,197	9,235	---	
Placed on feed (thou head)	24,917	23,326	23,549	7,365	5,270	5,221	6,336	6,726	5,700	---	
Marketings (thou head)	22,540	22,887	22,836	8,224	5,763	5,821	5,876	5,376	5/5,767	---	
Other disappearance (thou head)	1,632	1,398	1,236	324	316	375	233	312	371	---	
Hogs & pigs (10-States) 4/											
Inventory (thou head) 1/	42,420	41,100	39,670	41,820	41,100	38,210	37,845	39,335	39,870	39,235	
Breeding (thou head) 1/	5,348	5,258	5,050	5,377	5,258	4,948	4,840	4,840	5,155	5,230	
Market (thou head) 1/	37,072	35,842	34,620	36,443	35,842	33,262	33,005	34,495	34,715	34,005	
Farrowings (thou head)	9,020	8,831	8,208	2,265	1,863	2,161	2,034	2,150	1,957	5/2,305	
Pig crop (thou head)	67,680	67,648	63,714	17,255	14,254	16,878	15,853	16,729	15,156	---	

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live-weight. 3/ Beginning January 1984 prices are for 14-17 lbs.; January 1986 prices are for 14-18 lbs. 4/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 5/ Intentions. \*Classes estimated.

Information contact: Ron Gustafson or Leland Southard (202) 786-1830.



# Crops and Products

Table 17.—Supply & Utilization<sup>1,2</sup>

	Area			Yield	Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price
	Set aside 3/	Planted	Harvested									
	Mill. acres		Bu./acre					Mill. bu				\$/bu
<b>Wheat</b>												
1982/83	5.8	86.2	77.9	35.5	2,765	3,932	195	713	1,508	2,417	1,515	3.45
1983/84	30.0	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.51
1984/85	18.6	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.39
1985/86*	18.8	75.6	64.7	37.5	2,425	3,865	273	771	815	1,960	1,905	3.08
1986/87*	20.5	72.0	60.7	34.4	2,087	4,007	350	784	1,025	2,159	1,848	2.40
1987/88*	--	--	--	--	2,138	4,001	175	795	1,225	2,195	1,806	2.30-2.60
<b>Rice</b>												
	Mill. acres		lb/acre					Mill. cwt (rough equiv.)				\$/cwt
1982/83	0.42	3.30	3.26	4,710	153.6	203.4	--	6/62.9	68.9	131.8	71.5	7.91
1983/84	1.74	2.19	2.17	4,598	99.7	171.9	--	6/54.7	70.3	125.0	46.9	8.57
1984/85	.79	2.83	2.80	4,954	138.8	187.3	--	6/60.5	62.1	122.5	64.7	8.04
1985/86*	1.24	2.51	2.49	5,414	134.9	201.8	--	6/65.8	58.7	124.5	77.3	6.53
1986/87*	1.26	2.40	2.38	5,648	134.4	213.9	--	6/71.3	60.0	151.3	62.6	3.85
1987/88*	--	--	--	--	135.0	199.8	--	6/75.0	78.0	153.0	46.8	3.45-4.25
<b>Corn</b>												
	Mill. acres		Bu./acre					Mill. bu				\$/bu
1982/83	2.1	81.9	72.7	113.2	8,235	10,772	4,521	894	1,834	7,248	3,523	2.55
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.21
1984/85	3.9	80.5	71.9	106.7	7,674	8,684	4,079	1,081	1,865	7,036	1,648	2.63
1985/86*	5.4	83.4	75.2	118.0	8,877	10,536	4,095	1,160	1,241	6,496	4,040	2.23
1986/87*	11.9	76.7	69.2	119.3	8,253	12,295	4,550	1,180	1,450	7,180	5,115	1.45-1.65
1987/88*	--	--	--	--	7,200	12,320	4,650	1,200	1,600	7,490	4,870	1.60-1.90
<b>Sorghum</b>												
	Mill. acres		Bu./acre					Mill. bu				\$/bu
1982/83	0.7	16.0	14.1	59.1	835	1,154	495	10	210	715	439	2.47
1983/84	5.7	11.9	10.0	48.7	488	927	385	10	245	640	287	2.74
1984/85	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86*	.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1986/87*	2.0	15.3	13.9	67.7	942	1,493	800	29	200	729	764	1.30-1.50
1987/88*	--	--	--	--	678	1,442	500	30	225	755	687	1.50-1.80
<b>Barley</b>												
	Mill. acres		Bu./acre					Mill. bu				\$/bu
1982/83	0.4	9.5	9.0	57.2	516	675	241	170	47	458	217	2.18
1983/84	1.1	10.4	9.7	52.3	509	733	282	170	92	544	189	2.47
1984/85	.8	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1985/86*	.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1986/87*	1.6	13.1	12.0	50.8	610	940	300	174	150	624	316	1.60
1987/88*	--	--	--	--	548	867	305	175	125	605	261	1.50-1.70
<b>Oats</b>												
	Mill. acres		Bu./acre					Mill. bu				\$/bu
1982/83	0.1	14.0	10.3	57.8	593	749	441	85	3	529	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86*	.1	13.3	8.2	63.7	521	726	460	82	2	542	184	1.23
1986/87*	0.3	14.7	6.9	56.0	385	598	400	85	2	485	111	1.18
1987/88*	--	--	--	--	482	623	405	85	2	490	131	1.10-1.30
<b>Soybeans</b>												
	Mill. acres		Bu./acre					Mill. bu				\$/bu
1982/83	0	70.9	69.4	31.5	2,190	2,444	7/86	1,108	905	2,099	345	5.69
1983/84	0	63.8	62.9	26.2	1,636	1,981	7/78	983	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	598	1,721	316	5.84
1985/86*	0	63.1	61.6	34.1	2,099	2,415	7/86	1,053	740	1,879	536	5.05
1986/87*	0	61.8	59.4	33.8	2,007	2,543	7/103	1,160	700	1,863	580	4.80
1987/88*	--	--	--	--	1,825	2,420	7/90	1,170	650	1,910	495	4.75-5.25
<b>Soybean oil</b>												
								Mill. lbs				\$/lb
1982/83	--	--	--	--	12,041	13,144	--	9,858	2,029	11,883	1,261	20.6
1983/84	--	--	--	--	10,872	12,133	--	9,588	1,824	11,412	721	30.6
1984/85	--	--	--	--	11,468	12,209	--	9,817	1,660	11,577	632	29.5
1985/86*	--	--	--	--	11,617	12,257	--	10,053	1,257	11,310	947	18.0
1986/87*	--	--	--	--	12,653	13,600	--	10,500	1,100	11,700	1,900	15.0
1987/88*	--	--	--	--	12,700	14,500	--	11,000	1,500	12,900	2,100	12.0-15.0
<b>Soybean meal</b>												
								Thou. tons				\$/ton
1982/83	--	--	--	--	26,714	26,889	--	19,306	7,108	26,415	474	187
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,875	258	188
1984/85	--	--	--	--	24,529	24,784	--	18,480	4,917	24,397	387	125
1985/86*	--	--	--	--	24,851	25,338	--	19,090	6,036	25,126	212	195
1986/87*	--	--	--	--	27,438	27,650	--	20,400	7,000	27,400	250	160
1987/88*	--	--	--	--	27,550	27,800	--	21,050	6,500	27,550	290	150-175

See footnotes at end of table.

Table 17.— Supply &amp; Utilization, continued

	Area			Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested									
	Mil. acres		lb/acres									
Cotton 10/												¢/lb
1982/83	1.6	11.3	8.7	590	12.0	18.6	--	5.5	8.2	10.7	7.9	58.5
1983/84	6.8	7.9	7.3	508	7.8	15.7	--	5.8	6.8	12.7	2.8	58.3
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.7
1985/86 <sup>a</sup>	3.6	10.7	10.2	630	13.4	17.6	--	6.4	2.0	8.4	8.4	56.5
1986/87 <sup>a</sup>	3.6	10.0	8.5	552	9.7	19.1	--	7.3	6.7	14.0	5.2	52.2
1987/88 <sup>a</sup>	--	--	--	--	12.0	17.2	--	7.2	6.3	13.5	3.8	--

<sup>a</sup> June 8, 1987 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum, October 1 for soybean, and soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3678 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.045 cwt. of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIR, and acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: National Economic Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1986		1987			
	1982/83	1983/84	1984/85	1985/86	Apr	Dec	Jan	Feb	Mar	Apr
Wholesale prices										
Wheat, No. 1 HRW.										
Kansas City (\$/bu) 2/	3.94	3.84	3.74	3.28	3.45	2.58	2.70	2.80	2.90	2.90
Wheat, DNS.										
Minneapolis (\$/bu) 2/	3.95	4.21	3.70	3.25	3.42	2.77	2.92	2.65	2.61	2.60
Rice, S.W. La. (\$/cwt) 3/	18.00	19.38	17.98	16.11	15.50	10.13	10.13	9.86	8.93	10.38
Wheat										
Exports (mil bu)	1,508	1,428	1,424	915	65	58	73	76	74	NA
Mill grind (mil bu)	656	694	676	707	58	65	60	60	62	NA
Wheat flour production (mil cwt)	292	308	301	317	26	29	27	27	28	NA
Rice										
Exports (mil cwt, rough equiv)	68.9	70.3	62.1	58.7	3.0	-4.6	4.8	4.3	5.4	6.4
	Marketing year 1/				1985		1986			
	1983/84	1984/85	1985/86	Oct-Dec	Jan-Mar	Apr-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-Apr
Wheat										
Stocks, beginning (mil bu)	1,515	1,398	1,425	2,071.1	2,526.1	2,130.0	1,905.0	3,154.6	2,671.5	2,253.1
Domestic use:										
Food (mil bu)	643	651	678	176.8	166.9	110.7	171.1	187.6	169.4	171.8
Feed & seed (mil bu) 4/	469	502	371	24.9	4.9	1.8	349.0	34.8	46.7	2.6
Exports (mil bu)	1,428	1,424	915	247.3	226.1	115.3	320.8	264.2	208.1	232.1

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. NA = not available.

Information contacts: Allen Schlenwein and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1986		1987			
	1982/83	1983/84	1984/85	1985/86	Apr	Dec	Jan	Feb	Mar	Apr
U.S. price, SLW.										
1-1/16 in. (c¢/lb) 2/	63.1	73.1	60.5	60.0	62.6	54.2	57.2	54.8	54.6	57.7
Northern Europe prices:										
Index (c¢/lb) 3/	76.7	87.6	69.2	48.9	48.5	59.2	65.7	65.9	63.0	66.2
U.S. M 1-3/32 <sup>a</sup> (c¢/lb) 4/	78.0	87.1	73.9	64.8	72.9	62.1	65.3	64.8	62.5	65.2
U.S. mill consumption (thou bales)	5,512.8	5,927.0	5,544.5	6,398.9	571.3	555.5	620.8	587.0	647.3	NA
Exports (thou bales)	5,206.8	6,786.0	6,201.3	1,968.2	173.0	543.7	489.8	530.7	633.4	NA
Stocks, beginning (thou bales)	6,632	7,937	2,775	4,102	11,732	13,080	13,106	12,728	11,780	NA

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook "A" index; average of five lowest prices of 10 selected growths. 4/ Memphis territory growths. NA = not available.

Information contact: Bob Skinner (202) 786-1840.



Table 20.—Feed Grains

	Marketing year 1/				1986		1987			
	1982/83	1983/84	1984/85	1985/86	Apr	Dec	Jan	Feb	Mar	Apr
<b>Wholesale prices</b>										
Corn, No. 2 yellow, Chicago (\$/bu)	2.98	3.46	2.79	2.35	2.46	1.66	1.87	1.50	1.60	1.68
Sorghum, No. 2 yellow, Kansas City (\$/cwt)	4.80	5.22	4.46	3.72	4.00	2.62	2.50	2.57	2.80	2.85
Barley, feed, Minneapolis (\$/bu)	1.76	2.48	2.09	1.53	--	1.23	--	--	3/ 1.64	1.76
Barley, malting, Minneapolis (\$/bu)	2.53	2.84	2.55	2.24	2.40	1.88	1.81	1.92	2.01	2.05
<b>Exports</b>										
Corn (mil bu)	1,834	1,902	1,865	1,241	58	111	105	89	145	NA
Feed grains (mil metric tons) 2/	53.0	56.5	56.6	36.6	1.7	3.6	3.1	3.4	4.7	NA

	Marketing year 1/				1985		1986		1987	
	1982/83	1983/84	1984/85	1985/86	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov	Dec-Feb
<b>Corn</b>										
Stocks, beginning (mil bu)	2,537	3,523	1,006	1,648	1,648	8,615	6,587	4,990	4,040	10,304
<b>Domestic use:</b>										
Feed (mil bu)	4,521	3,818	4,078	4,085	1,215	1,300	1,086	494	1,388	1,472
Food, seed, ind. (mil bu)	895	975	1,091	1,160	278	264	308	308	280	270
Exports (mil bu)	1,834	1,902	1,865	1,241	418	465	304	154	321	315
Total use (mil bu)	7,249	6,694	7,036	6,486	1,811	2,029	1,589	956	1,989	2,058

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Aggregated data for corn, sorghum, oats, and barley.  
 3/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. NA = not available.

Information contacts: Dave Hull (202) 786-1840.

Table 21.—Fats &amp; Oils

	Marketing year 1/				1986			1987		
	1982/83	1983/84	1984/85	1985/86	Mar	Nov	Dec	Jan	Feb	Mar
<b>Soybeans</b>										
Wholesale price, No. 1 yellow, Chicago (\$/bu) 2/	6.11	7.78	5.88	5.20	5.37	4.96	4.88	4.90	4.84	4.86
Crushings (mil bu)	1,107.8	982.7	1,030.5	1,052.8	91.6	109.3	107.6	110.3	102.3	106.0
Exports (mil bu)	905.2	742.8	598.2	740.0	89.9	96.6	88.2	71.3	73.8	67.8
Stocks, beginning (mil bu)	254.8	344.6	175.7	316.0	97.5	108.1	127.4	117.2	113.1	105.4
<b>Soybean oil</b>										
Wholesale price, crude, Decatur (cts/lb)	20.62	30.55	29.52	18.0	17.56	14.88	14.94	15.60	15.40	15.21
Production (mil lb)	12,040.4	10,872.0	11,467.8	11,620.4	1,005.4	1,171.5	1,152.2	1,185.6	1,109.6	1,149.1
Domestic disp. (mil lb)	8,857.3	8,598.6	9,916.7	10,062.8	847.0	838.8	881.8	787.0	856.0	761.6
Exports (mil lb)	2,024.7	1,813.6	1,659.8	1,257.2	92.8	27.4	22.8	67.9	74.0	52.1
Stocks, beginning (mil lb)	1,102.5	1,260.9	720.5	632.5	1,181.1	963.6	1,268.9	1,306.8	1,837.3	2,017.0
<b>Soybean meal</b>										
Wholesale price, 44% protein, Decatur (\$/ton)	187.19	188.21	125.46	154.90	163.70	154.00	148.60	146.80	154.40	146.60
Production (thou ton)	26,713.6	22,756.2	24,529.3	24,957.8	2,159.7	2,562.8	2,527.3	2,590.1	2,408.9	2,489.1
Domestic disp. (thou ton)	19,306.0	17,615.2	19,481.7	19,122.3	1,405.0	1,575.2	1,786.6	1,926.4	1,513.5	1,538.4
Exports (thou ton)	7,108.7	5,359.7	4,916.5	6,007.0	648.4	818.4	877.7	592.8	930.1	992.4
Stocks, beginning (thou ton)	175.2	474.1	255.4	387.0	281.3	218.0	387.3	240.3	311.2	277.5
<b>Margarine, wholesale price, Chicago, white (cts/lb)</b>										
	41.1	46.3	58.4	42.1	41.53	38.89	38.85	39.25	39.75	39.20

1/ Beginning September 1 for soybeans; October 1 for soybean oil; calendar year for margarine. 2/ Beginning April 1, 1982. Prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Sickerton (202) 786-1691.

Table 22.—Farm programs, price supports, participation &amp; payment rates

(See the June 1987 issue.)

Information contact: Larry Van Meir (202) 786-1840.

Table 23.—Fruit

	Calendar years											
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 F
<b>Citrus</b>												
Production (thou ton)	14,586	14,788	15,242	14,255	13,328	16,484	15,105	12,057	13,608	10,782	10,488	5/11,811
Per capita consumption (lbs) 1/	119.3	117.2	124.5	107.4	108.5	112.7	104.7	109.6	120.2	102.8	115.9	119.4
<b>Non citrus</b>												
Production (thou tons)	12,384	11,846	12,274	12,460	13,689	18,152	12,961	14,217	14,154	14,280	14,230	13,934
Per capita consumption (lbs) 1/	85.8	84.2	84.3	82.5	85.8	87.3	88.1	88.0	88.0	93.7	92.6	94.0
	1986								1987			
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
<b>Fob shipping point prices</b>												
Apples (\$/canton) 2/	18.10	18.50	22.86	NA	17.03	13.70	13.63	14.00	10.67	14.00	14.50	15.35
Pears (\$/box) 3/	24.18	25.70	NA	14.67	14.00	15.00	15.10	14.50	16.00	18.63	14.75	14.10
Oranges (\$/box) 4/	4.18	4.27	3.63	4.03	4.34	4.47	6.28	4.24	4.24	4.75	4.79	4.94
Grapefruit (\$/box) 4/	5.20	5.98	6.17	6.76	6.63	6.29	4.18	4.54	4.50	4.55	4.76	5.21
<b>Stocks, ending</b>												
Fresh apples (all lbs)	267.2	118.8	25.4	7.8	2,349.5	4,142.7	3,532.2	2,891.7	2,307.2	1,720.2	1,174.0	751.8
Fresh pears (all lbs)	4.8	.7	75.0	124.4	325.1	333.2	281.2	214.7	170.9	127.1	92.1	54.0
Frozen fruits (all lbs)	461.4	558.1	719.6	741.1	740.7	855.6	777.8	720.9	632.3	563.0	497.7	485.3
Frozen orange juice (all lbs)	1,047.5	1,056.9	920.3	855.3	715.4	577.6	524.5	621.2	877.8	1,018.7	837.1	966.4

1/ Revised per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 2/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 3/ D'Anjou, Washington, standard box wrapped. U.S. No. 1, 80-135's. 4/ U.S. equivalent on-tree returns. 5/ As of June 1, 1987. NA = not available.  
F = forecast.

Information contact: Ben Huang (202) 786-1767.

Table 24.—Vegetables

	Calendar years									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
<b>Production</b>										
Total vegetables (1,000 cwt) 1/	402,836	382,165	413,925	381,370	379,123	431,815	403,320	457,392	483,769	445,436
Fresh (1,000 cwt) 1/ 2/	176,541	182,563	190,859	190,228	194,694	207,824	197,818	217,137	217,932	213,724
Processed (tons) 3/	11,318,790	8,980,100	11,153,300	9,557,100	9,221,480	11,179,580	10,270,050	12,013,020	11,781,860	11,585,630
Mushrooms (1,000 lbs)	388,703	454,007	470,069	468,578	517,146	490,826	551,831	585,681	587,956	NA
Potatoes (1,000 cwt)	385,334	366,314	342,447	302,857	338,591	355,131	333,811	362,612	407,108	352,274
Sweetpotatoes (1,000 cwt)	11,885	13,115	13,370	10,953	12,789	14,833	12,083	12,986	14,853	12,754
Dry edible beans (1,000 cwt)	16,558	18,935	20,552	26,729	32,781	28,563	15,520	21,070	22,175	22,898
	1986								1987	
	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan
<b>Shipments</b>										
Fresh (1,000 cwt) 4/	18,210	32,827	26,825	27,618	17,579	18,174	19,275	15,967	18,766	20,607
Potatoes (1,000 cwt)	13,604	16,037	9,882	7,787	8,066	7,907	11,332	9,828	10,838	18,569
Sweetpotatoes (1,000 cwt)	227	250	177	160	96	246	428	706	389	279

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop, all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimate reinstated for cucumbers with the 1984 crop, all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, canteloupes, honeydews, and watermelons. NA = not available.

Information contact: Shannon Hama (202) 786-1767.

Table 25.—Other Commodities

	Annual					1986				1987
	1982	1983	1984	1985	1986 F	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar
Sugar										
Production 1/	5,936	5,682	5,890	5,969	6,257	1,615	728	685	3,231	2,035
Deliveries 1/	9,153	8,812	8,454	8,035	7,810	1,834	1,913	2,069	1,993	1,908
Stocks, ending 1/	3,068	2,570	3,005	3,126	3,227	3,384	2,540	1,652	3,158	3,507
Coffee										
Composite green price N.Y. (cts/lb)	132.00	131.51	142.95	137.46	185.18	215.33	190.79	174.92	159.69	115.38
Imports, green bean equiv. (million lbs) 2/	2,352	2,259	2,411	2,550	2,596	810	653	635	498	574
	Annual					1986				1987
	1984	1985	1986	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Tobacco										
Prices at auctions 3/										
Flue-cured (dol/lb)	1.81	1.72	1.52	NQ	1.60	1.50	1.40	NQ	NQ	NQ
Burley (dol/lb)	1.68	1.59	1.57	1.58	NQ	NQ	1.58	1.57	1.52	1.57
Domestic consumption 4/										
Cigarettes (bil)	600.4	594.0	584.0	43.2	50.8	52.0	49.2	48.8	38.1	42.7
Loose cigars (mil)	3,493	3,226	3,090	188.9	272.3	268.5	220.9	261.6	223.4	213.4

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. F = forecast. NQ = no quote.

Information contacts: (sugar) Dave Harvey (202) 786-1768; (coffee) Fred Gray (202) 786-1769; (tobacco) Vernon Griss (202) 786-1768.



Table 26.—World Supply &amp; Utilization of Major Crops, Livestock, &amp; Products

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 F	1987/88 F
Million units							
<b>Wheat</b>							
Area (hectare)	238.7	237.7	229.1	231.4	228.3	227.8	
Production (metric ton)	449.5	477.5	489.3	511.5	498.8	529.2	508.8
Exports (metric ton) 1/	101.3	98.7	102.0	107.0	84.9	90.6	96.6
Consumption (metric ton) 2/	443.6	462.2	482.2	495.6	487.3	517.4	506.8
Ending stocks (metric ton) 3/	87.0	102.3	109.5	125.3	136.8	148.6	150.4
<b>Coarse grains</b>							
Area (hectare)	349.9	339.7	335.3	335.5	340.4	339.2	
Production (metric ton)	766.0	784.4	686.8	814.0	845.7	839.1	810.4
Exports (metric ton) 1/	86.6	89.6	93.1	100.7	83.3	87.4	90.0
Consumption (metric ton) 2/	737.7	753.1	761.7	783.1	770.6	800.4	821.5
Ending stocks (metric ton) 3/	120.7	151.8	77.0	107.8	182.9	221.6	210.5
<b>Rice, milled</b>							
Area (hectare)	145.2	141.1	144.3	144.4	144.8	145.2	
Production (metric ton)	280.6	285.7	308.0	319.2	320.4	317.2	323.3
Exports (metric ton) 4/	11.8	11.9	12.6	11.5	12.7	11.8	11.8
Consumption (metric ton) 2/	281.5	280.3	308.8	314.1	316.8	320.9	324.2
Ending stocks (metric ton) 3/	21.3	17.3	17.2	22.3	25.8	22.1	20.7
<b>Total grains</b>							
Area (hectare)	733.8	718.5	708.7	711.3	714.5	712.2	
Production (metric ton)	1,496.1	1,547.6	1,484.1	1,644.7	1,664.9	1,685.5	1,642.5
Exports (metric ton) 1/	209.7	200.2	207.7	218.2	180.9	189.8	198.4
Consumption (metric ton) 2/	1,482.8	1,505.6	1,552.7	1,592.8	1,574.8	1,638.7	1,652.6
Ending stocks (metric ton) 3/	229.0	271.4	203.7	255.4	345.5	392.3	381.6
<b>Oilseeds</b>							
Crush (metric ton)	138.9	143.5	136.6	150.6	154.0	156.4	
Production (metric ton)	169.4	178.2	165.6	191.0	185.9	196.8	188.0
Exports (metric ton)	35.9	35.2	33.0	32.8	34.2	34.8	
Ending stocks (metric ton)	13.5	20.5	15.8	21.2	26.8	28.4	
<b>Meals</b>							
Production (metric ton)	94.5	88.1	92.8	101.8	104.2	106.8	
Exports (metric ton)	28.8	31.6	29.6	32.3	34.3	35.2	
<b>Oil</b>							
Production (metric ton)	41.6	43.4	42.3	46.1	48.3	49.4	
Exports (metric ton)	13.4	14.0	13.7	15.6	16.4	16.3	
<b>Cotton</b>							
Area (hectare)	33.0	31.4	31.0	33.8	31.7	30.0	
Production (bale)	71.2	68.1	67.7	88.1	78.9	68.1	77.5
Exports (bale)	20.2	19.4	19.2	20.5	20.3	23.4	23.3
Consumption (bale)	66.2	68.3	68.7	70.4	76.9	81.4	81.0
Ending stocks (bale)	25.2	25.1	25.1	42.8	46.0	33.1	29.3
	1981	1982	1983	1984	1985	1986 F	1987 F
<b>Red meat</b>							
Production (mil metric tons)	83.6	93.9	96.4	98.1	101.8	102.3	102.4
Consumption (mil metric tons)	92.0	92.2	94.7	96.1	89.7	101.0	101.0
Exports (mil metric tons) 1/	5.7	5.8	5.8	5.9	6.3	6.1	6.4
<b>Poultry</b>							
Production (mil metric tons)	22.5	23.1	23.5	24.2	25.2	26.0	27.4
Consumption (mil metric tons)	22.1	22.7	23.5	24.0	24.8	25.5	26.9
Exports (mil metric tons) 1/	1.5	1.4	1.3	1.2	1.2	1.2	1.3
<b>Dairy</b>							
Milk production	388.7	396.8	412.5	413.0	417.9	422.8	423.3

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1982 data correspond with 1981/82, etc. F = forecast.

Information contact: Frederic Surle (202) 786-1693.

# U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1986			1987			
	1984	1985	1986	Apr	Nov	Dec	Jan	Feb	Mar	Apr
<b>Export commodities</b>										
Wheat, f.o.b. vessel, Gulf ports (\$/bu)	4.17	3.73	3.19	3.76	2.90	2.97	3.00	3.08	3.17	3.13
Corn, f.o.b. vessel, Gulf ports (\$/bu)	3.50	2.89	2.27	2.59	1.89	1.89	1.77	1.74	1.85	1.83
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu)	3.00	2.64	2.16	2.56	1.89	1.94	1.75	1.75	1.87	1.86
Soybeans, f.o.b. vessel, Gulf ports (\$/bu)	7.38	5.83	5.45	5.57	5.24	5.14	5.13	5.08	5.14	5.35
Soybean oil, Decatur (cts/lb)	30.75	27.03	16.36	17.64	14.66	14.68	15.45	15.21	15.03	15.03
Soybean meal, Decatur (\$/ton)	166.80	127.15	137.62	156.72	154.05	149.54	147.65	153.24	146.98	158.48
Cotton, @ market avg. spot (cts/lb)	68.37	58.55	53.47	62.62	45.75	54.15	57.17	54.75	54.60	57.72
Tobacco, avg. price at auction (cts/lb)	170.64	172.05	184.26	188.58	146.40	146.40	144.90	145.82	146.51	145.58
Rice, f.o.b. mill, Houston (\$/cwt)	18.47	18.48	14.60	17.25	13.00	13.00	11.13	10.50	10.50	10.50
Inedible tallow, Chicago (cts/lb)	17.47	14.33	9.03	9.84	8.47	9.40	10.69	11.00	9.77	12.58
<b>Import commodities</b>										
Coffee, N.Y. spot (\$/lb)	1.46	1.42	2.01	2.28	1.67	1.48	1.27	1.20	1.03	1.02
Rubber, N.Y. spot (cts/lb)	49.70	41.91	42.87	39.18	44.78	44.67	45.93	46.51	46.11	47.39
Cocoa beans, N.Y. (\$/lb)	1.06	.98	.88	.85	.87	.86	.86	.85	.87	.90

Information contact: Mary Taymourian (202) 786-1692.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1986							1987				
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
	March 1973=100							April 1971=100				
<b>Total U.S. trade 1/</b>												
Nominal	114	110	108	107	107	108	107	101	99	99*	97*	96*
<b>Agricultural trade</b>												
Nominal 2/	4,498	4,567	4,661	4,680	4,733	4,784	4,903	5,238	6,102	6,954	7,783	8,838
Real 3/	85	85	87	87	89	90	88*	86*	85*	85*	84*	84*
<b>Soybeans</b>												
Nominal 2/	103	161	250	266	280	294	305	314	327	343	358	374
Real 3/	75	75	75	75	75	76	75*	72*	71*	71*	70*	69*
<b>Wheat</b>												
Nominal 2/	26,449	26,498	26,501	26,514	26,733	27,020	27,616	29,587	34,601	38,700	44,815	57,302
Real 3/	101	100	102	102	109	110	107*	105*	104*	106*	105*	108*
<b>Corn</b>												
Nominal 2/	4,083	4,172	4,297	4,320	4,369	4,430	4,534	4,842	5,631	6,407	7,158	8,020
Real 3/	77	78	80	80	80	80	79*	76*	76*	76*	74*	74*
<b>Cotton</b>												
Nominal 2/	233	231	230	233	236	237	237	234	233	233	272	270
Real 3/	92	91	90	91	92	92	92*	91*	90*	90*	89*	89*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S. dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S. total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. \*Preliminary. Information contact: Edward Wilson (202) 786-1688.

Table 29.—Trade Balance

	Fiscal years*									Mar
	1978	1980	1981	1982	1983	1984	1985	1986	1987 F	1987
	\$ million									
<b>Exports</b>										
Agricultural	31,978	40,481	43,780	39,085	34,769	38,027	31,201	26,325	26,000	2,416
Nonagricultural	135,938	169,846	185,423	176,310	159,373	170,014	179,236	178,813	NA	17,923
Total 1/	167,916	210,327	229,203	215,405	194,142	208,041	210,437	202,938	NA	20,338
<b>Imports</b>										
Agricultural	16,186	17,276	17,218	15,481	16,271	19,916	19,740	20,875	20,000	1,912
Nonagricultural	177,424	223,590	237,469	233,353	230,629	297,736	313,722	342,855	NA	31,118
Total 2/	193,610	240,866	254,687	248,834	246,900	316,652	333,462	363,730	NA	33,030
<b>Trade balance</b>										
Agricultural	15,793	23,205	26,562	23,614	18,498	18,111	11,461	5,450	6,000	504
Nonagricultural	-41,585	-53,744	-52,046	-57,043	-71,256	-127,722	-134,486	-165,242	NA	-13,185
Total	-25,792	-30,539	-25,484	-33,429	-52,758	-109,611	-123,025	-160,792	NA	-12,681

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986.

1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value). NA = not available. F = forecast. Information contact: Steve MacDonald (202) 786-1621.



Table 30.—U.S. Agricultural Exports &amp; Imports

	Fiscal years*				Mar	Fiscal years*				Mar
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	Thousand units					\$ million				
Exports										
Animals, live (no) 1/	754	996	570	--	21	276	255	344	--	12
Meats & preps., excl. poultry (mt)	422	427	451	2/500	42	929	906	1,012	--	106
Dairy products (mt)	418	423	481	--	38	393	414	430	400	44
Poultry meats (mt)	225	234	265	400	26	280	257	282	--	31
Fats, oils, & greases (mt)	1,395	1,217	1,355	3/1,200	107	703	608	477	--	38
Hides & skins incl. furskins	--	--	--	--	--	1,318	1,325	1,456	--	155
Cattle hides, whole (no) 1/	24,283	25,456	25,873	--	2,066	1,010	1,019	1,150	--	103
Hide pelts (no) 1/	2,551	2,237	2,697	--	320	67	60	65	--	12
Grains & feeds (mt)	108,194	93,903	74,437	--	7,774	17,304	13,285	8,476	4/8,200	752
Wheat (mt)	41,699	28,523	25,490	30,000	1,783	6,497	4,264	3,259	5/3,000	182
Wheat flour (mt)	1,071	718	1,137	1,300	151	234	164	204	--	20
Rice (mt)	2,293	1,972	2,382	2,300	171	897	677	648	500	40
Feed grains, incl. products (mt)	55,546	55,362	36,293	47,200	4,685	8,217	6,884	3,819	3,000	359
Feeds & fodders (mt)	7,021	6,533	8,381	6/9,700	938	1,216	1,004	1,289	--	133
Other grain products (mt)	564	795	754	--	80	243	293	257	--	26
Fruits, nuts, and preps. (mt)	1,831	1,807	2,003	--	179	1,594	1,687	1,766	--	151
Fruit juices incl. froz. (hl) 1/	5,598	4,641	3,652	--	379	223	200	148	--	17
Vegetables & preps. (mt)	1,527	1,420	1,467	--	152	899	946	1,000	--	116
Tobacco, unmanufactured (mt)	227	257	224	200	20	1,433	1,588	1,318	1,400	107
Cotton, excl. linters (mt)	1,481	1,277	482	1,500	138	2,395	1,945	678	1,700	144
Seeds (mt)	252	289	269	--	24	326	352	366	400	32
Sugar, cane or beet (mt)	285	355	375	--	57	74	65	75	--	11
Oilseeds & products (mt)	26,861	23,803	27,557	--	2,859	8,602	6,195	6,266	7/6,000	578
Oilseeds (mt)	20,466	17,886	20,684	8/19,600	1,876	6,254	4,324	4,394	--	371
Soybeans (mt)	19,265	16,621	20,139	18,100	1,845	5,734	3,876	4,174	4,000	354
Protein meal (mt)	5,060	4,606	5,588	6,000	810	1,217	853	1,127	1,000	169
Vegetable oils (mt)	1,435	1,311	1,284	--	74	1,131	1,018	746	--	38
Essential oils (mt)	11	12	7	--	1	86	105	105	--	10
Other	465	443	568	--	44	1,082	1,069	1,126	--	114
Total	143,794	125,867	109,941	127,500	11,462	38,027	31,201	26,325	26,000	2,416
Imports										
Animals, live (no) 1/	1,907	2,120	1,885	--	187	596	569	637	700	56
Meats & preps., excl. poultry (mt)	905	1,123	1,139	1,127	107	1,931	2,214	2,248	2,400	227
Beef & veal (mt)	550	674	693	712	64	1,165	1,285	1,252	1,500	128
Pork (mt)	328	416	406	415	39	703	847	800	800	91
Dairy products (mt)	382	418	400	410	26	757	763	786	800	61
Poultry and products 1/	--	--	--	--	--	122	93	101	--	10
Fats, oils, & greases (mt)	18	21	22	--	2	13	18	17	--	2
Hides & skins, incl. furskins 1/	--	--	--	--	--	216	240	200	--	40
Wool, unmanufactured (mt)	59	43	53	--	5	193	145	160	--	16
Grains & feeds (mt)	1,805	2,070	2,311	2,580	208	534	604	668	700	62
Fruits, nuts, & preps., excl. juices (mt)	4,036	4,483	4,637	4,830	524	1,634	1,881	1,976	2,000	247
Bananas & plantains (mt)	2,727	3,022	3,042	3,100	278	666	752	740	700	73
Fruit juices (hl) 1/	27,247	35,112	31,539	28,000	2,865	671	995	698	600	66
Vegetables & preps. (mt)	2,093	2,140	2,189	2,260	281	1,314	1,347	1,560	1,500	158
Tobacco, unmanufactured (mt)	190	191	208	220	21	563	556	605	700	62
Cotton, unmanufactured (mt)	32	31	41	--	5	17	17	14	--	1
Seeds (mt)	82	92	89	88	22	97	91	111	100	22
Nursery stock & cut flowers 1/	--	--	--	--	--	282	318	353	--	25
Sugar, cane or beet (mt)	2,829	2,338	1,905	1,800	127	1,144	812	654	--	47
Oilseeds & products (mt)	1,137	1,271	1,508	1,788	137	799	784	639	600	52
Oilseeds (mt)	223	253	197	--	12	95	88	68	--	4
Protein meal (mt)	118	159	138	--	20	21	17	15	--	2
Vegetable oils (mt)	787	859	1,173	--	105	683	670	555	--	46
Beverages excl. fruit juices (hl) 1/	14,120	15,494	15,488	--	1,367	1,547	1,622	1,848	--	165
Coffee, tea, cocoa, spices (mt)	1,776	1,868	1,940	1,868	180	4,777	4,883	6,099	5,400	446
Coffee, incl. products (mt)	1,128	1,128	1,223	1,160	113	3,300	3,244	4,400	3,800	292
Cocoa beans & products (mt)	451	539	507	525	46	1,058	1,285	1,189	1,200	93
Rubber & allied gums (mt)	808	798	801	800	85	854	680	615	600	74
Other	--	--	--	--	--	844	900	885	--	73
Total	--	--	--	--	--	18,816	19,740	20,875	20,000	1,812

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. -- not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-8/ are based on slightly different groups of commodities. Fiscal 1986 exports of categories used in the 1987 forecasts were: 2/ 413 thousand mt. 3/ 1,306 thousand mt. 4/ 9,648 million. 5/ 3,489 million, i.e. includes flour. 6/ 8,218 thousand mt. 7/ 6,439 million. 8/ 20,481 thousand mt. F = forecast.

Information contact: Steve MacDonald (202) 786-1621.

Table 31. U.S. Agricultural Exports by Region

Region & country	Fiscal years*				Mar	Change from year* earlier				Mar
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	\$ million					Percent				
Western Europe	8,265	7,183	6,857	6,800	681	-8	-22	-5	-3	0
European Community (EC-12)	8,650	6,668	6,442	6,400	646	8	-23	-3	-2	0
Belgium-Luxembourg	836	470	361	--	27	31	-44	-23	--	-38
France	510	396	431	--	43	-1	-22	9	--	58
Germany, fed. Rep.	1,260	900	1,001	--	135	-13	-28	11	--	44
Italy	771	677	693	--	77	-4	-12	2	--	-8
Netherlands	2,227	1,926	2,042	--	185	-21	-14	6	--	-18
United Kingdom	790	628	628	--	46	-4	-20	0	--	-16
Portugal	702	502	308	--	31	10	-28	-39	--	-26
Spain, incl. Canary Islands	1,232	832	723	--	65	3	-32	-13	--	7
Other Western Europe	615	515	415	400	35	-10	-16	-19	0	-13
Switzerland	311	232	128	--	18	-12	-26	-45	--	1
Eastern Europe	741	532	447	500	66	-10	-28	-16	0	-6
German Dem. Rep.	132	81	52	--	14	7	-39	-36	--	39
Poland	197	126	42	--	20	-15	-36	-66	--	660
Yugoslavia	180	137	134	--	15	-28	-24	-2	--	-26
Romania	155	88	112	--	6	35	-43	27	--	-70
USSR	2,512	2,525	1,105	800	30	156	1	-56	-45	-78
Asia	15,208	11,833	10,498	11,700	1,018	12	-22	-12	2	3
West Asia (Mideast)	1,865	1,452	1,243	1,600	159	26	-22	-14	0	73
Turkey	222	129	111	--	16	693	-42	-13	--	2
Iraq	423	371	321	--	36	31	-12	-13	--	84
Israel	351	300	255	--	28	20	-15	-15	--	44
Saudi Arabia	497	381	335	--	61	11	-23	-12	--	174
South Asia	867	599	517	400	23	-26	-31	-14	-2	-68
Bangladesh	157	205	94	--	3	3	31	-54	--	-78
India	376	129	80	--	8	-51	-66	-30	--	32
Pakistan	285	228	285	--	6	33	-20	25	--	-88
China	692	239	88	200	20	27	-65	-63	0	29
Japan	6,835	5,663	5,138	5,500	430	18	-18	-9	0	-3
Southeast Asia	1,218	842	725	800	61	1	-31	-14	14	-38
Indonesia	438	204	172	--	10	7	-53	-16	--	-18
Philippines	300	285	270	--	25	-21	-5	-5	--	-36
Other East Asia	3,631	3,138	2,787	3,200	326	10	-14	-11	7	25
Taiwan	1,408	1,342	1,108	--	123	14	-5	-17	--	13
Korea, Rep.	1,816	1,400	1,277	--	185	6	-23	-9	--	38
Hong Kong	407	386	389	--	37	18	-3	1	--	17
Africa	2,868	2,527	2,135	1,800	140	26	-12	-16	5	-12
North Africa	1,542	1,207	1,402	1,300	101	6	-22	16	0	-10
Morocco	341	156	159	--	13	52	-54	2	--	-34
Algeria	162	220	330	--	34	-20	36	50	--	56
Egypt	882	766	875	--	46	-3	-13	14	--	-27
Sub-Saharan	1,327	1,320	733	600	38	62	-1	-44	-14	-18
Nigeria	345	367	158	--	6	4	6	-57	--	35
Rep. S. Africa	525	189	70	--	2	304	-64	-63	--	-73
Latin America & Caribbean	5,279	4,570	3,599	3,800	315	9	-13	-21	8	28
Brazil	438	557	444	--	26	10	27	-20	--	62
Caribbean Islands	827	771	752	800	69	7	-7	-2	0	5
Central America	396	361	334	400	26	11	-9	-7	33	-5
Colombia	220	238	137	--	13	-14	8	-42	--	-8
Mexico	1,966	1,566	1,115	1,300	133	11	-20	-29	27	86
Peru	227	106	108	--	4	-12	-53	2	--	-64
Venezuela	778	721	493	--	33	26	-7	-32	--	18
Canada	1,936	1,727	1,466	1,700	147	4	-11	-15	27	26
Oceania	216	204	216	200	19	54	-6	6	0	10
Total	38,027	31,201	26,325	27,500	2,416	8	-18	-16	-1	1
Developed Countries	19,180	15,225	13,963	14,200	1,304	4	-21	-8	23	1
Less Developed Countries	14,902	12,680	10,721	11,800	896	7	-15	-15	26	10
Centrally Planned Countries	3,945	3,296	1,640	1,500	116	67	-16	-50	-23	-43

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. F-- forecast.  
 -- not available.

Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1621.



# Farm Income

Table 32.—Farm Income Statistics

	Calendar years										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P	1987 F
	\$ billion										
1. Farm receipts	97.5	114.3	133.8	142.0	144.1	147.1	140.9	146.4	148.5	139	(31 to 133)
Crops (incl. net CCC loans)	48.6	53.2	62.3	71.7	72.5	72.4	67.0	69.2	72.7	63	54 to 56
Livestock	47.6	59.2	69.2	68.0	69.2	70.2	69.5	72.9	69.4	71	71 to 73
Farm related 1/	1.2	1.9	2.2	2.3	2.5	4.5	4.4	4.3	6.4	5	4 to 6
2. Direct Government Payments	1.8	3.0	1.4	1.3	1.8	3.5	2.3	8.4	7.7	12	15 to 17
Cash payments	1.8	3.0	1.4	1.3	1.8	3.5	4.1	4.0	7.6	8	7 to 9
Value of PIK commodities	0.0	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	4	7 to 9
3. Total gross farm income (4+5+6) 2/	108.8	128.4	150.7	149.3	166.3	163.4	152.4	174.4	166.6	158	154 to 156
4. Gross cash income (1+2)	99.3	117.3	135.1	143.3	146.0	150.6	150.2	154.9	156.2	151	146 to 148
5. Noncash income 3/	8.4	9.3	10.6	12.3	13.8	14.1	13.2	19.3	11.5	10	8 to 10
6. Value of inventory change	1.1	1.9	5.0	-6.3	6.5	-1.3	-10.9	6.3	-1.1	-3	-4 to 0
7. Cash expenses 4/	71.4	84.2	101.7	109.1	113.2	113.8	113.0	115.6	112.1	102	96 to 98
8. Total expenses	88.9	103.2	123.3	133.1	139.4	140.7	139.5	141.7	136.1	125	119 to 121
9. Net cash income (4-7)	27.8	33.1	33.4	34.2	32.8	36.8	37.1	39.3	44.0	49	48 to 52
10. Net farm income (3-8)	19.9	25.2	27.4	16.1	26.9	22.7	13.0	32.7	30.5	33	33 to 37
Dated (1982\$)	28.5	34.9	34.8	18.9	29.6	22.7	12.5	30.3	27.3	29	27 to 30
11. Off-farm income	26.1	29.7	33.8	34.7	35.8	36.4	37.0	37.9	40.8	43	43 to 45
12. Loan changes 5/: Real estate	7.6	7.6	13.0	8.3	9.4	4.0	2.5	-0.8	-5.6	-8	-8 to -4
13. 5/: Nonreal estate	6.8	8.3	10.8	5.8	6.2	3.4	1.0	-0.8	-9.2	-10	-9 to -5
14. Rental income plus monetary change	3.5	4.1	6.3	6.1	6.4	6.4	5.7	7.8	8.0	7	5 to 7
15. Capital expenditures 5/	15.0	17.9	19.8	18.0	16.8	13.7	13.0	12.5	10.1	8	6 to 8
16. Net cash flow (9+12+13+14-15)	30.8	35.1	43.7	37.5	37.9	37.0	33.3	33.0	27.1	30	34 to 38

P = preliminary, F = forecast. 1/ Income from machine hire, custom work, sales of forest products, and other misc. cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add due to rounding.

Information contact: Richard Kold (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar years										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P	1987 F
	\$ billion										
<b>Assets</b>											
Real estate 1/	507.7	600.7	704.2	778.2	780.2	745.6	736.1	639.6	559.6	515	515
Non-real estate	149.0	183.0	213.8	224.0	225.0	232.2	220.4	216.3	211.9	196	196
Livestock & poultry	31.8	51.3	61.4	60.6	53.5	53.0	49.7	49.6	45.8	44	48
Machinery & motor vehicles	69.8	78.2	90.8	96.8	103.0	103.7	100.9	95.0	82.2	88	86
Crops stored	24.8	28.0	33.5	36.5	36.1	40.6	33.2	33.7	37.1	29	26
Financial assets	22.4	25.5	28.2	30.1	32.4	34.9	36.5	38.1	36.7	35	36
Total farm assets	656.7	783.7	918.1	1,003.2	1,005.2	977.8	956.5	856.1	771.4	711	711
<b>Liabilities</b>											
Real estate	58.0	65.6	78.5	87.9	97.2	101.2	103.7	102.9	87.3	90	83 <sup>5</sup>
Non-real estate	52.4	66.4	76.7	82.3	91.6	102.4	98.7	85.8	84.8	87	75
CCC loans	4.5	8.7	5.1	5.0	8.0	15.4	10.8	8.6	16.9	19	14
Other non-real estate	52.4	60.7	71.6	77.5	83.6	87.0	87.9	87.1	77.9	68	61
Total farm liabilities	114.9	131.9	155.2	170.4	188.8	203.6	202.4	188.7	172.1	177	158
Total farm equity	541.8	651.8	762.9	832.9	816.4	774.2	754.0	667.3	599.3	534	553
	Percent										
<b>Selected ratios</b>											
Debt-to-assets	17.5	16.8	16.9	17.0	18.8	20.8	21.2	23.2	24.9	24.9	22.2
Debt-to-equity	20.0	19.3	19.6	19.7	23.1	26.3	26.8	30.2	33.2	33.1	28.6
Debt-to-net cash income	412.3	398.2	464.4	497.7	576.1	553.0	545.5	505.8	436.2	361.2	316.0

1/ Excludes farm household. P = preliminary, F = forecast.

Information contact: Richard Kold (202) 786-1808.

Table 34.—Cash Receipts from Farm Marketings, by State

Region State	Livestock & Products				Crops 1/				Total 1/			
	1985	1986	Feb	Mar	1985	1986	Feb	Mar	1985	1986	Feb	Mar
			1987	1987			1987	1987			1987	1987
\$ million 2/												
North Atlantic												
Maine	250	241	19	20	127	142	20	24	378	383	39	44
New Hampshire	71	72	6	6	36	38	3	3	107	110	9	10
Vermont	352	361	29	32	32	36	2	2	384	388	31	34
Massachusetts	124	131	11	11	265	292	10	14	389	423	20	25
Rhode Island	13	12	1	1	48	63	3	4	63	75	4	5
Connecticut	206	210	15	17	110	162	9	12	316	372	24	29
New York	1,845	1,811	141	156	719	691	39	47	2,564	2,501	180	203
New Jersey	144	150	12	13	447	430	16	22	591	580	28	35
Pennsylvania	2,184	2,238	180	201	966	925	71	76	3,150	3,163	250	277
North Central												
Ohio	1,511	1,565	118	127	2,430	2,017	58	94	3,940	3,582	176	221
Indiana	1,728	1,850	131	137	2,859	2,591	109	57	4,597	4,441	240	194
Illinois	2,063	2,144	159	186	5,704	4,692	218	174	7,768	6,836	377	371
Michigan	1,231	1,237	95	100	1,619	1,418	55	49	2,850	2,655	150	150
Wisconsin	4,100	4,160	321	370	1,012	889	11	*	5,111	5,049	331	371
Minnesota	3,370	3,395	258	303	3,102	2,644	51	71	6,472	6,039	308	374
Iowa	4,811	4,980	423	470	4,390	4,026	278	89	9,201	8,007	700	559
Missouri	1,930	1,825	137	169	1,738	1,572	63	69	3,668	3,496	200	238
North Dakota	686	676	78	69	2,060	1,599	41	74	2,746	2,275	119	143
South Dakota	1,903	1,526	150	139	1,076	922	10	4	2,979	2,448	160	144
Nebraska	4,113	4,260	406	337	3,093	2,632	73	18	7,206	6,891	479	355
Kansas	3,264	3,447	287	311	2,478	1,957	54	35	5,741	5,404	341	346
Southern												
Delaware	352	359	29	27	137	111	4	4	490	470	33	31
Maryland	770	814	63	58	378	370	14	27	1,148	1,185	78	84
Virginia	1,004	1,127	74	86	623	488	18	21	1,627	1,614	92	107
West Virginia	192	156	11	13	49	71	5	3	241	227	15	17
North Carolina	1,934	2,179	152	167	1,880	1,598	26	32	3,914	3,777	178	200
South Carolina	415	453	32	35	618	437	8	10	1,033	890	40	45
Georgia	1,727	1,885	139	152	1,600	1,340	34	51	3,327	3,224	172	203
Florida	1,015	1,000	87	88	3,726	3,856	459	505	4,741	4,856	546	594
Kentucky	1,352	1,311	70	82	1,519	1,074	33	24	2,871	2,385	103	106
Tennessee	1,000	1,144	81	107	1,057	882	27	28	2,057	2,025	108	135
Alabama	1,301	1,431	95	114	776	573	18	35	2,077	2,003	113	148
Mississippi	1,010	1,046	78	82	1,126	726	10	2	2,136	1,771	68	78
Arkansas	1,825	2,022	127	135	1,455	960	15	8	3,280	2,982	142	126
Louisiana	491	503	35	40	968	862	21	7	1,460	1,365	56	47
Oklahoma	1,726	1,835	112	142	938	745	14	18	2,664	2,580	126	160
Texas	5,441	5,483	427	528	3,857	2,910	96	125	8,298	8,404	522	654
Western												
Montana	802	720	59	61	405	434	3	12	1,207	1,154	62	74
Idaho	862	868	63	71	1,200	1,059	51	50	2,063	1,927	113	121
Wyoming	479	455	31	40	110	110	5	4	589	568	36	44
Colorado	2,019	2,219	167	209	1,145	890	28	36	3,164	3,109	196	246
New Mexico	718	709	48	81	369	307	13	12	1,086	1,015	61	93
Arizona	702	699	51	65	827	798	37	113	1,529	1,497	88	177
Utah	409	436	46	38	138	133	11	8	548	569	57	46
Nevada	144	160	15	14	78	72	8	7	222	232	22	20
Washington	932	981	69	73	1,865	1,812	111	120	2,797	2,793	180	193
Oregon	622	647	47	56	1,156	1,135	65	74	1,778	1,782	111	130
California	4,165	4,557	306	346	9,805	9,982	518	510	13,970	14,839	824	856
Alaska	8	10	1	1	18	21	1	1	26	30	2	2
Hawaii	83	84	7	7	458	503	38	43	540	587	45	50
United States	69,401	71,690	5,485	6,105	72,702	63,997	2,862	2,810	142,103	135,687	8,357	8,915

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period.

2/ Estimates as of the end of current month. Rounded data may not add. \*Value rounded to zero.

Note: The cash receipts for 1985 published in the May issue were incorrect and should be disregarded.

Information contact: Roger Strickland (202) 786-1804.



Table 35.—Cash Receipts from Farming

	Annual						1986			1987		
	1981	1982	1983	1984	1985	1986	Mar	Nov	Dec	Jan	Feb	Mar
	\$ million											
Farm marketings and CCC loans *	141,616	142,624	136,460	142,153	142,103	135,687	9,474	15,632	13,671	12,872	8,357	8,815
Livestock and products	69,151	70,249	69,453	72,905	69,401	71,690	5,683	6,626	5,718	6,164	5,495	6,105
Meat animals	39,748	40,817	38,893	40,832	38,185	39,131	3,098	3,696	3,130	3,537	3,153	3,553
Dairy products	18,095	18,234	18,757	17,944	18,135	17,824	1,536	1,468	1,534	1,551	1,399	1,576
Poultry and eggs	9,949	9,538	10,003	12,219	11,196	12,833	924	1,204	931	933	831	850
Other	1,358	1,560	1,800	1,910	1,885	1,901	124	258	123	144	111	125
Crops	72,465	72,375	67,007	69,248	72,702	63,997	3,791	9,006	7,953	6,808	2,862	2,810
Food grains	11,619	11,469	9,733	8,578	8,846	5,862	281	412	348	405	49	89
Feed crops	17,770	17,404	15,367	15,728	21,397	17,557	874	2,959	3,125	2,682	547	24
Cotton (lint and seed)	4,055	4,454	3,711	3,270	3,800	2,842	99	636	380	481	130	62
Tobacco	3,250	3,342	2,768	2,841	2,722	1,918	20	182	417	167	26	10
Oil-bearing crops	13,853	13,812	13,530	13,861	12,237	10,760	655	2,072	1,440	1,450	514	693
Vegetables and melons	8,772	8,113	8,512	9,237	8,582	8,761	703	463	454	730	555	735
Fruits and tree nuts	6,503	6,821	6,062	6,787	6,812	7,387	388	1,005	776	307	465	420
Other	6,543	6,960	7,326	7,946	8,306	8,910	772	1,276	1,013	588	577	778
Government payments	1,932	3,492	9,295	8,430	7,704	11,813	42	434	1,961	479	1,499	1,338
Total	143,548	146,116	145,755	150,583	148,807	147,500	9,516	16,066	15,632	13,451	9,856	10,253

\* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Note: The cash receipts for 1982-85 published in the May issue were incorrect and should be disregarded.

Information contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar years									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P
	\$ million 2/									
Feed	13,967	16,036	19,314	20,971	20,855	18,592	21,725	19,850	19,588	18,206
Livestock	7,072	10,150	13,012	10,670	8,999	8,696	8,814	9,498	8,991	9,536
Seed	2,484	2,638	2,904	3,220	3,428	3,172	2,987	3,447	3,369	2,984
Farm-origin inputs	23,523	28,824	35,230	34,861	33,282	31,460	33,526	32,795	31,948	30,725
Fertilizer	6,529	6,619	7,369	9,490	9,409	8,018	7,067	7,429	7,258	5,787
Fuels and oils	4,356	4,609	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790
Electricity	1,069	1,389	1,447	1,526	1,747	2,041	2,146	2,166	2,073	2,090
Pesticides	1,938	2,656	3,436	3,539	4,201	4,282	4,161	4,768	4,965	4,331
Manufactured inputs	13,892	15,273	17,887	22,434	23,827	22,228	20,877	21,506	20,882	16,998
Short-term interest	4,203	5,167	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,110
Real estate interest	4,329	5,060	6,190	7,544	9,142	10,481	10,815	10,733	9,878	8,611
Total interest charges	8,532	10,227	13,058	16,261	19,864	21,830	21,430	21,129	18,698	15,721
Repair and operation	5,765	6,638	7,280	7,648	7,587	7,730	7,543	7,850	7,450	7,318
Hired labor	7,953	8,279	8,982	9,294	8,932	10,182	9,660	9,838	10,347	10,255
Machine hire and custom work	1,682	1,776	2,063	1,823	1,984	2,025	1,896	2,170	2,185	1,791
Dairy deduction	0	0	0	0	0	0	633	656	163	431
Other operating expenses	4,972	7,703	9,047	9,378	9,865	10,700	10,646	10,860	11,522	10,958
Total operating expenses	20,372	24,396	27,732	28,143	28,368	30,637	30,378	31,374	31,667	30,753
Depreciation	15,493	16,963	19,345	21,474	23,573	23,886	23,491	23,020	21,101	19,784
Taxes	3,660	3,603	3,871	3,891	4,246	4,394	4,323	4,384	4,423	4,471
Net rent to non-operator										
landlord	3,412	3,963	6,182	6,075	6,184	6,219	5,441	7,504	7,387	6,646
Other overhead expenses	22,565	24,529	29,398	31,440	36,003	34,499	33,255	34,908	32,911	30,901
Total Production expenses	88,884	103,249	123,305	133,139	139,444	140,654	139,466	141,712	136,108	125,098

1/ Includes operator household. 2/ Totals may not add due to rounding. P = preliminary.

Information contact: Richard Kofi (202) 786-1808.

Table 37.—CCC Net Outlays by Commodity & Function  
(See the June 1987 issue.)

Information contact: Richard Pazadalski (202) 447-5148.

## Transportation

Table 38.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1986			1987			
	1984	1985	1986 P	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Rail freight rate index 1/ (Dec 1984=100)										
All products	99.3	100.0	100.7	101.0	100.5	99.8	99.7 P	99.7 P	99.7 P	100.1 P
Farm products	98.7	99.0	99.6	99.7	99.1	98.5	98.5 P	98.5 P	98.7 P	99.3 P
Grain	98.6	98.3	98.9	99.1	98.5	97.8	97.8 P	97.8 P	98.0 P	98.7 P
Food products	99.1	100.1	99.9	100.9	99.2	98.4	98.4 P	98.4 P	98.4 P	98.6 P
Grain										
Rail carloadings (thou cars) 2/	27.2	22.9	24.3	17.7	29.8	24.8	23.0	26.7 P	27.3 P	25.3 P
Fresh fruit & vegetable shipments										
Piggy back (thou cwt) 3/ 4/	570	602	629	694	486 P	478 P	527 P	543 P	493 P	678 P
Rail (thou cwt) 3/ 4/	640	532	555	499	705 P	740 P	663 P	518 P	533 P	624 P
Truck (thou cwt) 3/ 4/	8,006	8,298	8,658	9,770	8,511 P	8,345 P	8,180 P	8,454 P	8,541 P	9,771 P
Cost of operating trucks hauling produce 5/										
Owner operator (cts/mile)	115.5	116.1	113.1	112.7	112.4	113.0	114.8	115.0	115.1	115.1
Fleet operation (cts/mile)	115.3	116.7	113.6	113.3	113.0	113.8	115.2	115.2	114.8	115.0

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1986 and 1987. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.Q. Hutchinson (202) 786-1840.

## Indicators of Farm Productivity

Table 39.—Indexes of Farm Production Input Use & Productivity

(See the Jan.-Feb. 1987 issue.)

Information contact: James Johnson (202) 786-1800.

Table 40.—Supply & Use of Major Pesticides

(See the Oct. 1986 issue.)

Information contact: Stan Daberkow (202) 786-1458.

## Food Supply and Use

Table 41.—Per Capita Food Consumption Indexes (1967 = 100)

(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.

Table 42.—Per Capita Consumption of Major Food Commodities (Retail Weight)

(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.



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